

GRADUATE COLLEGE

College Administration

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The OSU Graduate College - Developing the person, the scholar and the professional...

Graduate education at Oklahoma State University (OSU) is organized around the scholarly pursuit of new knowledge, both through didactic instruction and through independent and group research conducted utilizing the facilities and resources of a major research university. OSU's national and international reputation is grounded in the scholarly research and creative work performed by faculty and students under the auspices of OSU's graduate programs.

The first graduate degree was conferred by OSU in 1912, and the Graduate College was organized in 1929. OSU offers more than 200 graduate degree programs, including several interdisciplinary and joint-degree programs.

1.0 Overview

1.1 Graduate Students.

Over 4,400 graduate students currently study at OSU. Part of OSU's mission as a Land Grant University is to serve the people of the region, the state, the nation, and the world by making a first-class education available to all. In response to the growing diversity and demographic changes in the state and in the nation, OSU is committed to preparing graduates to live and work in a culturally pluralistic world. The Graduate College is proud of the diversity of its graduate student population and of their contributions to both the generation and dissemination of new knowledge through their involvement in the University's research and instructional programs. Numerous multicultural student organizations on campus provide information and support to international and diverse students to assist in the successful completion of their graduate studies.

1.2 The Graduate College.

The Graduate College supervises all graduate work offered by OSU, including graduate degree programs at OSU—Stillwater, OSU—Tulsa, OSU Center for Health Sciences in Tulsa and OSU College of Veterinary Medicine in Stillwater. Professional degrees offered through the College of Veterinary Medicine and the Center for Health Sciences in Tulsa are not under the Graduate College. The Graduate College sets standards for admission to graduate standing and recommends to the Board of Regents those students who have completed work required for earning graduate degrees.

In addition, the Graduate College offers a number of student services and professional preparation opportunities specifically designed for

graduate student success while at OSU as well as after graduation. These activities include graduate teaching assistant orientation programs, three-minute oral communication competitions and thesis/dissertation writing workshops.

1.3 Graduate College Memberships.

The Graduate College is a member of the Council of Graduate Schools (CGS), the Conference of Southern Graduate Schools (CSGS) and the Midwestern Association of Graduate Schools (MAGS).

1.4 Organization of the Graduate College.

Consistent with its objective of maintaining the highest standards in graduate education, the Graduate College administers the policies and procedures specified and established by the Graduate Faculty, Graduate Council, Board of Regents for the Oklahoma Agricultural and Mechanical Colleges and the Oklahoma State Regents for Higher Education. The dean of the Graduate College is the senior administrator of the College as well as the dean for graduate students. The Graduate Council is the executive committee of the Graduate Faculty; it is elected by the Graduate Faculty to work with the dean of the Graduate College in the development and administration of applicable policy. The Graduate Council formulates and reviews policies concerning the conduct of graduate study at OSU, and Council members participate in the periodic review of graduate programs. All proposed policies and requests related to the initiation and development of graduate curricular offerings and programs are referred to the Graduate Council for review, comment and approval.

1.5 Accreditation.

OSU is accredited by the Higher Learning Commission, (HLC) of the North Central Association of Colleges and Schools. (HLC, 30 N. LaSalle Street, Suite 2400, Chicago, IL 60602-2504; ph 1-800-621-7440; www.hlcommission.org (<http://www.hlcommission.org>)). Several programs within the disciplinary colleges are also accredited by other agencies; see "Accreditation (p. 17)" in "The University (p. 17)" section of the Catalog.

1.6 General Regulation.

Full authority on all academic decisions within the Graduate College rests with the dean of the Graduate College. The Graduate College policies and procedures described in the Catalog are for informational purposes. They are subject to regular review and may be revised at any time by the dean of the Graduate College in consultation with the Graduate Council.

1.7 Responsibilities.

All graduate students are expected to read and to comply with the written regulations of their graduate programs and disciplinary college as well as the Graduate College and University. The regulations presented in the Catalog may be supplemented by written departmental or program requirements available at departmental offices and/or websites. Admission to a specific graduate program obligates the student to understand and adhere to the policies of that program.

General regulations in the following sections relate to requirements for admission, enrollment and academic standing. Subsequent sections outline requirements for the following credentials: Graduate Certificate, Master's, Specialist in Education, Doctor of Education, and Doctor of Philosophy degrees. Particular attention should be given to timing and substantive requirements for matriculation, especially admission, the Plan of Study, residency, language proficiency, research, dissertation/thesis/creative component/report, and graduation. The regulations are prescribed by the Graduate Council with the intent of assuring high-

quality graduate programs and effective interaction of Graduate Faculty members and graduate students.

1.8 Email as Official Correspondence.

OSU uses the institutional O-Key email address as an official means of communication with OSU faculty, staff, administrators, and students. All students have an official OSU email address that is activated when they set up their O-Key account. Students are expected to activate and check their OSU email on a frequent and consistent basis to remain informed of their official University business and are expected to ensure that adequate email space is available to receive messages.

1.9 Tuition and Fees.

Refer to the "Tuition, Fees and Cost Estimates (p. 76)" section of the Catalog.

1.10 Exception Requests.

Any request for a waiver of, exception to, or deviation from, any requirement set forth in the "Graduate College" section of the Catalog must be in the form of a written petition to the dean of the Graduate College. Such petitions should include a supporting letter from the graduate faculty advisor and/or graduate program coordinator.

2.0 Services for Graduate Students

For a complete list of University services, please visit the "Current Student" link on the "Resources" menu on the Graduate College website (<http://gradcollege.okstate.edu>) or the "Student Life" link on the OSU website (<http://go.okstate.edu>).

2.1 Graduate and Professional Student Government Association.

The Graduate and Professional Student Government Association (GPSGA) is an official advisory body to the University President and dean of the Graduate College and serves as the representative voice for graduate and professional students at OSU. Its mission is to improve all aspects of post-graduate education and student life at OSU.

The Association provides for representation from each graduate and professional degree program. Representatives are nominated by the graduate programs with membership conferred by the GPSGA president. Each representative is appointed for a term of one year; a representative must be in good academic standing and is enrolled full time.

The GPSGA provides funds for graduate and professional student organizations and in collaboration with the Graduate College, travel grants to help students defray costs incurred by attending and presenting at professional meetings. For more information consult gpsga.okstate.edu (<http://gpsga.okstate.edu>).

3.0 Funding Your Graduate Education

3.1 General Financial Aid.

One of the most common sources of funding for graduate students is graduate assistantships. Graduate teaching and research assistantships (GTAs/GRAs) support OSU's instructional and scholarly activities. Most academic programs routinely evaluate graduate admission applications not only for admission consideration but also for the possibility of assistantship offers. The graduate program makes assistantship offers. These awards assist students in paying for their graduate education and also offer opportunities to gain valuable skills and experience in their discipline and as a professional.

3.2 Office of the Bursar Payment Plan

OSU offers enrolled students a semester-based payment option, as an alternative to the traditional lump-sum payment method. This plan allows for University-billed expenses to be paid in regular monthly installment without a finance charges. The plan has a \$25 application fee and additional information can be found at <https://bursar.okstate.edu/payment-option-plan> (<https://bursar.okstate.edu/payment-option-plan/>).

3.3 Federal Financial Aid.

All domestic students who want to qualify for federal financial aid should complete the Free Application for Federal Student Aid (FAFSA). Students are encouraged to complete the FAFSA annually as soon after October 1 as possible to receive aid for the subsequent academic year. The FAFSA is available at www.fafsa.ed.gov (<http://www.fafsa.ed.gov>).

3.4 OSU Short-Term Emergency Loans.

In addition to potential federal loans that may be awarded, OSU assists students in need of immediate funds through the Short-Term Emergency Loan Program. This program is designed to help OSU students who are currently enrolled and attending classes to meet educationally-related off-campus unexpected expenses. The program is not designed to pay a debt owed to OSU. Qualified students may borrow up to \$500 less a \$10 service charge one time per semester. Additional information about the Short-Term Emergency Loan Program can be found at <https://financialaid.okstate.edu/aid/loans/stl> (<https://financialaid.okstate.edu/aid/loans/stl/>).

3.5 Graduate Assistantships.

OSU recognizes two types of graduate assistants for students enrolled in master's, specialist and doctoral degree programs. Graduate certificate seeking only and non-degree seeking students are not eligible for GTA or GRA positions or associated benefits.

A Graduate Teaching Assistant (GTA) must be admitted to and meet the requirements of the Graduate College, be fully admitted to a graduate degree program, enrolled, and be under the supervision of an appropriate graduate faculty member. In consultation with the supervisor, the GTA works to gain instructional skills and an increased understanding of the discipline. The GTA is provided a stipend and their primary responsibilities are to support the University's instructional mission. Services provided by a GTA may include: classroom or laboratory teaching; advising and mentoring of students; proctoring examinations; grading papers, homework, and/or projects; accompanying/coaching musical or vocal performances, providing artistic instruction or assisting with preparation and management of materials and programs that are utilized in imparting knowledge or in the instructional process; or providing other general assistance in the instruction process. A GTA may be assigned primary responsibilities in an extension, outreach or service role for which those responsibilities support the instructional mission of the University. GTAs may not be given duties to support faculty research or those primarily clerical in nature.

A Graduate Research Assistant (GRA) must be admitted to and meet the requirements of the Graduate College, be fully admitted to a graduate degree program, enrolled, and be under the supervision of an appropriate graduate faculty member. A GRA is provided a stipend and their primary responsibilities are to provide general support to the University's research mission. These responsibilities may or may not relate directly to the student's thesis or dissertation. Duties of the GRA primarily involve applying and mastering research concepts, practices or methods of scholarship. Services provided by a GRA may include: assisting faculty members in a research or creative activity; perform degree-

related professional or administrative services that supports research, instruction, professional development, or outreach missions of the University; developing and evaluating instructional materials or curricula; or assuming responsibility for designated scholarly endeavors.

“Perform degree-related professional or administrative services” does not include jobs that are outside the student’s field of study.

Assistantship inquiries should be addressed to the unit head or graduate program coordinator of the unit/department/school/program in which the appointment is desired. The service expected is governed by the terms of the appointment.

3.6 Graduate Assistantship Responsibilities.

An offer of an assistantship is a commitment by a unit/department/school/program to provide financial support to admitted graduate students. Assistantships are an investment made by a unit/department/school/program and are granted primarily to enable the student to pursue an advanced degree and gain valuable experience. Accepting an assistantship brings with it a professional obligation to fulfill all of the responsibilities associated with the assistantship assignment. Included in this professional obligation is the expectation that students who have accepted an assistantship will diligently pursue their degree to completion. In recognition of this commitment and to provide adequate time for students holding assistantships to devote to study, employment as a graduate assistant is limited to a total, from all University sources (including external grants and contracts), of 0.50 FTE (an average of 20 hours per week) in the Fall and Spring semesters, and 0.75 FTE (an average of 30 hours per week) between the end of the Spring semester and the beginning of the Fall semester. Exceptions to this limitation may be requested by the employing unit or graduate program to the dean of the Graduate College.

A student with a 0.50 FTE assistantship is expected to devote, on average, 20 hours per week to their duties as a graduate teaching or research assistant; the remainder of academic effort is devoted to his or her own studies and research. The time devoted to the assistantship may vary from day to day and week to week as long as it does not exceed the average given above.

As part of a graduate student’s educational experience, OSU makes a number of GRAs available on a routine basis. Graduate students on a GRA are expected to devote full-time effort to their graduate programs. While the GRA appointment provides a modest stipend for an average of 10 or 20 hours per week for a 0.25 or a 0.50 FTE assignment, respectively, in recognition of contributions to the OSU research enterprise, it does not indicate that no additional time and effort may be required of the graduate student who is actively pursuing a graduate research degree. Depending on the stage of the research project and the graduate student’s advancement in the program, the student may be enrolled in research credit hours for academic credit or only enrolled in formal coursework. Irrespective of that enrollment, it is expected that the graduate student is working full-time toward completion of the advanced degree. OSU, like most institutions nationwide, does not define the research credit hour as equating to a specific amount of time and effort, as the nature of research is highly dependent on the individual’s progress on the project. For instance, general OSU policy only requires a minimum enrollment in two credit hours when a graduate student is working on a research project and using OSU resources unless they are employed as a GTA/GRA.

In addition, all students holding a graduate assistantship are required to be full-time students - see “Enrollment Requirements” below. For fall

and spring semesters, students employed 0.50 FTE must be enrolled in at least six credit hours to be considered full-time, while students employed less than 0.50 FTE must be enrolled in at least nine credit hours to be considered full-time. However, full-time enrollment for students admitted to doctoral candidacy is two credit hours. For the summer term, students employed at any level must be enrolled in at least two credit hours during any summer session to be considered full-time.

International students who are dependent upon an assistantship for their financial guarantee must remember that forfeiture of that assistantship may require the re-submission of a newly revised financial guarantee to the Office of International Students and Scholars. Students who forfeit their graduate assistantships risk rescission of tuition waivers, as well as any health insurance coverage for graduate assistants provided by the University.

Note that all graduate student benefit programs, such as tuition waivers, are only available to individuals with a primary classification as a graduate student enrolled in a degree program, which does not include certificate-seeking or non-degree seeking graduate students. OSU employees taking graduate classes do not qualify for graduate student benefit programs, irrespective of whether their employment is a benefit eligible position. One cannot selectively opt-out of certain benefits to seek eligibility for other benefits. Please contact the Graduate College or Human Resources if you have questions.

3.7 Graduate Assistantship General Benefits.

Graduate Teaching or Research Assistants employed at least 0.50 FTE in the fall/spring semester (average of 20 hours per week) are enrolled in a minimum of six (or two for doctoral candidates) eligible graduate hours will receive a tuition waiver (hours of enrollment must be required per the graduate degree program). Summer tuition waivers for the same GTA or GRA for spring semester will apply during the summer regardless of summer employment. Tuition waivers cannot be applied to independent study, leveling, undergraduate or some outreach type courses. Granting of these tuition waivers is also contingent upon the student submitting an electronic GTA/GRA (GSSI) tuition waiver agreement through the Graduate College website (<https://gradcollege.okstate.edu/resources/current-student-resources.html>), by the first day of the semester, in which they acknowledge their employment, enrollment and good academic standing responsibilities. Once enrolled, good academic standing (i.e., not on academic probation – beyond probationary admission) is a requirement for OSU tuition waiver eligibility. Once matriculated, a graduate student going on probation is not eligible for tuition waiver benefits. This does not preclude a GTA/GRA appointment(s). Graduate programs can request a one-time exception for exceptional circumstances from the graduate dean. For more information regarding tuition waiver benefits or academic standing, please visit the Graduate College website (gradcollege.okstate.edu (<http://gradcollege.okstate.edu>)).

Any graduate student employed as a GTA and/or a GRA less than 0.50 FTE total per week will not be eligible for any type of tuition waiver benefit.

3.7.1 Health Insurance Benefits.

Graduate Teaching or Research Assistants employed in a 0.25 FTE GTA/GRA position during the fall or spring semesters and who are enrolled in at least nine graduate credit hours throughout that entire semester are eligible for subsidized single-person-coverage health insurance through OSU for the fall (or spring) semester. Note: Spring semester

eligibility coverage continues through the following summer regardless of employment or enrollment status.

Graduate Teaching or Research Assistants who are not eligible for health insurance coverage during the summer session by virtue of their eligibility during the previous spring semester but who are employed in a 0.25 FTE GTA/GRA position during the eight-week summer session and enrolled in at least two graduate credit hours are eligible for subsidized single-person-coverage health insurance through OSU for the summer term.

The University subsidizes the student's coverage on a semester-by-semester basis. Students receiving the GTA/GRA insurance are required to pay the semester health fee. Information on the policy is available at OSU Human Resources <http://hr.okstate.edu/student-health-plan> (<http://hr.okstate.edu/student-health-plan/>).

Eligible graduate students are automatically enrolled for the insurance coverage if they meet eligibility requirements. If students have other insurance coverage or choose not to be enrolled in the student health plan, they may complete a declination form to opt out. A declination form can be found at the following site <http://hr.okstate.edu/student-health-plan> (<http://hr.okstate.edu/student-health-plan/>). The form must be submitted by the deadline to OSU Human Resources, Benefits Office 106J Whitehurst.

3.8 Health Insurance for International Students.

The Oklahoma State University Board of Regents requires that all visa-holding (i.e. non-immigrant) students at OSU be covered by health insurance. The OSU Student Insurance Policy is the recommended health insurance and will be billed to all non-immigrant student accounts automatically. Payment for the student insurance is included in the costs listed on the financial affidavit that international students are required to submit to receive a F-1 or J-1 visa.

The insurance premium can be waived for non-immigrant students sponsored by the United States Government, a foreign government recognized by the United States of America, or certain international, government sponsored or non-governmental organizations. Such waivers will be based on the government or organization guaranteeing payment of all health care expenses including evacuation and repatriation.

The insurance premium will also be waived for students who provide documented evidence of health insurance coverage by an employer. Non-immigrant students employed by OSU and eligible for both employer-provided insurance and international student health insurance may select between the two, as long as the insurance selected includes evacuation and repatriation coverage.

Students covered by a private medical insurance plan with benefits comparable to or better than the OSU plan, may request a waiver from OSU's international student health insurance requirement. Coverage must be in effect from the first day of their first semester classes for a 12-month period.

To use alternate insurance, students must complete and submit a waiver request no later than the fifth day of classes. Waiver forms can be found on the International Students and Scholars (ISS) website at <http://iss.okstate.edu>.

If a student holds an appointment as at least a 0.25 FTE OSU GTA or GRA position, OSU provides a subsidized student health insurance policy.

3.9 McNair Graduate Fellowships for former McNair Scholars.

Entering graduate students in residential degree programs who are graduates of a McNair Scholar Program as undergraduates may be eligible to become McNair Graduate Fellows. McNair Graduate Fellows receive a tuition waiver for all degree-eligible courses up to the number of hours in their degree program, irrespective of a qualifying assistantship. Such tuition waivers cannot apply to independent study, leveling, or outreach-exception type courses. The McNair Graduate Fellow Tuition Waiver Program is competitive and is not guaranteed, irrespective of the McNair application waiver received. Please contact the Graduate College (grad-i@okstate.edu (gradi@okstate.edu)) for more information as restrictions apply. Also, note that all graduate student benefit programs, such as the McNair Graduate Fellow Tuition Waiver Program, are only available to individuals with a primary classification as degree seeking graduate students. OSU employees taking graduate classes do not qualify for graduate student benefit programs, irrespective of whether their employment is a benefit eligible position. One cannot opt-out of certain benefits in an a-la-carte manner to seek eligibility for other benefits. Please contact the Graduate College or Human Resources if you have any additional questions. McNair Graduate Fellows are required to submit the necessary contract to the Graduate College each year and restrictions apply.

3.10 City Year National Service Scholars.

Oklahoma State University is proud to partner with City Year through our shared visions and values of integrating the power of knowledge and service in addressing social problems. The OSU Graduate College City Year National Service Scholars Program provides City Year Alumni an application fee waiver and a tuition waiver for all degree-eligible courses up to the number of hours in their degree program; however, acceptance as an OSU Graduate College City Year National Service Scholar is competitive and is not guaranteed. Please contact the Graduate College or grad-i@okstate.edu for specific requirements.

3.11 Spouse/Partner Tuition Waivers.

A spouse/partner of a graduate teaching or research assistant who is receiving a tuition waiver that is associated with an eligible assistantship is eligible to apply for a waiver of the non-resident portion of tuition for all graduate level/eligible courses taken. Tuition waivers cannot apply to independent study, leveling or certain outreach-type courses. Contact the Graduate College for details.

3.12 Student Employment.

Career Services provides assistance to OSU students seeking part-time employment or work study programs. Students are informed of job opportunities on campus and in the Stillwater community. Applications are available in room 360 Student Union. Jobs on campus usually offer 12 to 20 hours of work per week in clerical, technical, food service or general labor positions. Rate of pay and work schedules vary.

Individual job search assistance is available with the graduate career consultant in the Student Union Career Services Office or with any of the college career consultants located in the respective disciplinary colleges. Services include resume and curriculum vitae development, written correspondence assistance, mock interviews and interview preparation, academic and non-academic job search assistance, workshops and career fairs.

4.0 Admission to the Graduate College

Holders of baccalaureate or first professional degrees from accredited colleges and universities or those of recognized standing are eligible to seek admission to the Graduate College. Applicants must complete the web-based application and submit official transcripts of all academic work and degrees received including any previous graduate coursework and degrees. No application for admission will be reviewed until the application fee is paid.

The prospective student should obtain transcripts for bachelor's degree(s) conferred or pending as well as for any graduate or professional coursework and upload these transcripts as part of their application (some programs may require applicants to upload transcripts from all institutions previously attended). If an applicant is offered admission to graduate studies, the applicant will be required to have the institution that granted their bachelor's degree to send one official transcript to the Graduate College, 202 Whitehurst, Stillwater, OK 74078.

To be official, the transcript must be issued from the school and must show the complete scholastic record, bear the official seal of the institution, be signed by the issuing officer, and be in a sealed envelope or electronically delivered directly from the issuing institution.

To assure adequate time for review, completed applications and transcripts should be received at least 60-90 days prior to the graduate program application deadline or the beginning of the semester, whichever comes first. All transcripts become the property of OSU and are not released or returned.

When the applicant's file is complete, the faculty in the graduate program of the student's area of interest reviews the material and recommends an admission status to the dean of the Graduate College. The final decision for admission to the Graduate College is determined by the graduate dean on the basis of the graduate program's recommendations, prior academic performance of the applicant, and availability of space, facilities, and faculty mentors in the program.

4.1 OSU Faculty Members.

No member of the faculty, with the rank of associate professor or above or equivalent rank at the time of completing the requirements, may be granted a degree or graduate certificate from this institution. This regulation also applies to faculty members in the schools of engineering holding the rank of assistant professor or above.

4.2 Types of Admission.

Admission to a graduate program at OSU is based on an evaluation of an applicant's overall record, experience, personal qualifications, proposed area of study, and fit with the graduate program. For admission without qualification, a GPA of at least 3.00 on a 4.00 scale or the equivalent is expected in undergraduate coursework or a 3.00 in any graduate or professional coursework already completed. Graduate programs are encouraged to evaluate applications holistically and may petition the Graduate College on behalf of an applicant for an exception to the cumulative GPA requirement. Academic programs may set more stringent admission requirements. Please check with the graduate program to which you are applying in order to determine any program specific requirements.

4.2.1 Admission Without Qualification.

Students planning to work toward a graduate degree in a recognized graduate program may be admitted in good standing provided they meet all Graduate College and graduate program requirements.

4.2.2 Provisional Admission.

A student can be admitted provisionally upon recommendation of the graduate program and with concurrence by the dean of the Graduate College. Admission with provisional status is granted to an applicant who does not meet one or more of the graduate program's admission requirements or when the applicant does not have the necessary academic background. In this case, the graduate program requires specific provisions be met for admission in good standing. For example, a graduate program may require additional leveling coursework or higher test scores. The first obligation of a student admitted provisionally is to successfully meet all of the provisions specified at the time of admission. Failure to meet these provisions could result in the dismissal from the program.

4.2.3 Probationary Admission.

A student can be admitted with probation status upon recommendation of the graduate program with concurrence by the dean of the Graduate College. Admission with probation status is granted to an applicant who has deficiencies in previous academic coursework. A student admitted on probation status must make at least a 3.00 GPA through the semester in which they complete nine hours of courses eligible for graduate credit. Upon successful fulfillment of these requirements the student will be granted good academic standing. Failure to meet the required level of academic performance while in a probationary status may result in dismissal from the Graduate College.

4.2.4 Conditional Admission.

Several graduate programs at OSU will consider an applicant for conditional admission. An applicant can be admitted conditionally upon recommendation of the graduate program and with concurrence by the dean of the Graduate College. Conditional admission means that the applicant is academically qualified for admission to the graduate degree program but lacks a minimum English proficiency test score which satisfies the University's or graduate program's minimum (see "International Student Admission" for minimum requirements).

4.3 Non-Degree Seeking Student Status.

An applicant may be admitted to the Graduate College as a non-degree seeking student if he or she does not have immediate plans to become a degree candidate, but wants to take graduate courses, prerequisites, or other courses. Admission to the Graduate College as a non-degree seeking student means only that the student will be permitted to enroll in courses through the Graduate College. It does not imply that the student has been or will be admitted to a graduate program leading to an advanced degree or that the student will be able to obtain a graduate degree from OSU. Non-degree seeking students are not eligible for GTA or GRA positions or associated tuition waiver benefits.

4.3.1 Non-Degree Seeking Student Status Requirements.

Non-degree seeking students are subject to the same admission standards as degree-seeking students, including English language proficiency. Applicants for non-degree seeking student status are not automatically admitted without due deliberation of their past academic performance. A non-degree seeking applicant can be considered for admission "Without Qualification" provided their overall GPA is 3.00 or higher for all courses on their bachelor's degree transcript and/or transcripts from their graduate or professional coursework. An applicant whose GPA does not meet these criteria can be considered for admission

after consultation and recommendation of the Graduate College's non-degree seeking student advisor who may consider additional factors in making a decision, such as the following:

- length of time since last attendance at an institution of higher learning,
- a written appeal from the applicant explaining exceptional circumstances that warrant admission, and/or
- a letter of recommendation written by faculty who can speak to the applicant's potential for graduate work.

The prospective student is responsible for filing a new application for admission to the Graduate College should they wish to become a degree-seeking candidate. The new application will be evaluated by the graduate program and the dean of the Graduate College to ascertain admissibility to the degree program.

Given that non-degree seeking coursework is not guided by a Plan of Study or approved by an advisor, no more than nine semester credit hours of coursework taken while a non-degree seeking student may be used on a Plan of Study to meet requirements for a graduate degree (including a graduate certificate) program. In addition, only three semester credit hours of coursework taken while a non-degree seeking student may be used on a Plan of Study toward an MBA degree. Non-degree seeking students may not enroll in more than nine hours of courses eligible for graduate credit without permission of the dean of the Graduate College, or their designee. To ensure that non-degree seeking students do not inadvertently exceed this limitation, an enrollment hold will be placed on each student's record in this status after the student has registered for six or more credit hours. This hold may be removed by the Graduate College (see below) once the student has formally re-acknowledged this nine-hour limitation.

Non-degree seeking students are subject to the same academic regulations as those graduate students admitted into degree programs. Such students are strongly encouraged to consult with the instructor of any course in which they intend to enroll in order to ensure they are adequately prepared for that course.

Non-degree seeking students may not enroll in thesis (5000) or dissertation (6000) courses.

Generally, International students with an F-1 visa, except students on Optional Practical training (OPT) or Curricular Practical training (CPT), may not be admitted or enroll as non-degree seeking students.

Academic advising for non-degree seeking student is provided by an advisor in the Graduate College. Students should contact the Graduate College at 405-744-6368 or grad-academici@okstate.edu (gradi@okstate.edu) for details.

4.4 International Student Admission.

International applicants are expected to submit applications, financial affidavits, transcripts and/or mark sheets, and, if required, official scores of the English proficiency examinations. Applicants who present a TOEFL score of at least 79 iBT/550 PBT or a PTE academic test score of at least 53, or an IELTS academic stream score of at least 6.5 satisfy the Graduate College's English proficiency requirements for admission to a graduate program. Note that some graduate programs require an English proficiency score or other tests above these levels, and applicants should contact the program for specific language requirements. Completed applications are due no later than February 1 for fall enrollment and August 1 for spring enrollment. Applications that become complete after

these deadline dates may be reviewed, but the Graduate College cannot guarantee an admissions decision will be made with sufficient time for the issuance of the I-20 form required to obtain an entry visa.

4.4.1 English Proficiency.

As a condition of admission to graduate study at OSU, all persons for whom English is a second language are required to present proof of English competency regardless of the number of semesters or terms completed at OSU or in other institutions of higher education. A waiver of this requirement can be obtained for students who have completed a baccalaureate or graduate degree from an accredited institution of higher learning, at which English is the primary language of instruction, located in a country in which English is a recognized primary language. Note, that additional testing on-campus may be still necessary if employment as a graduate teaching assistant is desired. Graduate programs may have additional requirements.

Proof of English competency can be in the form of an official examination must have been taken within the last two years.

Applicants who present a TOEFL score of at least 61 iBT/500 PBT, but at less than 79 iBT/500 PBT or an IELTS Academic Stream of 6.0, or a PTE academic test score of 44 and who demonstrate unusual academic promise may be admitted to graduate study on a conditional status upon petition to the Graduate College by the graduate program.

Applicants with English proficiency a test scores of at least 61 iBT/500 PBT, but less than 79 iBT/550 PBT, an IELTS Academic Stream of 6.0 or PTE Academic test score of 44 must successfully complete a minimum of 12 weeks of study at an intensive English program (IEP) approved by the Oklahoma State Regents for Higher Education State Regents. At least two-thirds (eight weeks) of the 12 weeks must be instruction at an advanced level. A list of State Regents' approved IEPs can be found in the OSRHE Academic Affairs Procedures Handbook. The OSU intensive English program, known as the English Language Institute (ELI), is a state-approved IEP. More information on the OSU ELI program can be found here https://global.okstate.edu/eli/about_osu_eli.html.

Applicants, who do not submit a test score, can seek admission to the OSU English Language Institute (ELI) in their first semester. These students will be issued an I-20 by ELI. After successful completion of an approved 12 week ELI program as described above, the student will be eligible for admission to their graduate program and will be issued an I-20 by the Graduate College. Concurrent enrollment in graduate courses and ELI is not permitted.

4.4.2 Spoken English Proficiency for Employment.

OSU policy requires all persons for whom English is a second language to demonstrate an acceptable level of spoken English before being employed in an instructional related capacity, including laboratory assignments. Graduate students who serve only as laboratory assistants (e.g., setting up and/or maintaining equipment) or graders are not required to comply with these provisions. See <https://gradcollege.okstate.edu/prospective-students/international-teaching-assistant-test.html> for specific policy requirements for the International Teaching Assistant Program. Any new international teaching assistant (ITA) is required to have a qualifying score of 26 or greater on the speaking portion of the iBT or to take the ITA test prior to being approved for instructional assignments. All new ITAs are also required to participate in the international teaching assistant orientation. Any new international teaching assistant (ITA) who submits a PTE or IELTS score are required to take the ITA test prior to being approved for instructional assignments. See <https://gradcollege.okstate.edu/>

prospective-students/international-teaching-assistant-test.html for specific policy requirements.

5.0 Transfer of Graduate Credits

Transfer credit for "non-aged" courses must be recommended by the graduate student's advisory committee through the submission of a Plan of Study, which requires approval by the dean of the Graduate College. See Section 7.0 for additional information on coursework time limits.

Transfer credit will only be considered if it was earned when the student was post-baccalaureate (i.e., after earning a bachelor's degree) at an accredited institution and the applicable course(s) was/were certified as graduate credit by that institution. All courses used as transfer credit must have a grade of "B" or better.

Transfer of credits from medical professional programs (e.g., DO, DVM and MD) to graduate degrees may also be considered when a student was admitted to a medical professional program at an accredited institution and the applicable courses were certified for enrollment restricted to professional-level study. All courses used as transfer credit must have a grade of "B" or better or a grade of "pass" for those institutions which only offer professional courses as a "pass/no pass" grading system.

Up to three hours of transfer credit may be used toward an OSU graduate certificate and up to nine credit hours of transfer credit may be used toward any OSU graduate degree. A doctoral student may transfer more than nine hours if they have completed a master's degree and if the courses are approved by their advisory committee. Doctoral students must include a minimum of 30 hours of OSU credit on their Plan of Study.

Also, see **Section 11.2** for the number of times a course can be used in multiple degree Plans of Study.

6.0 Enrollment Policies

6.1 Initial and Continuous Enrollment Policy.

A prospective student must enroll in courses at OSU within the time frame specified in the admission letter to retain active status. A prospective student who does not conform to these conditions must reapply for admission.

Any student who interrupts enrollment for one year (i.e., a consecutive period of one fall semester plus one spring semester plus one summer term) must re-apply for admission, and will be subject to the regulations in effect at the time of reapplication. See section 6.6 below for additional doctoral candidacy enrollment requirements.

6.2 Full-Time Enrollment.

To be considered enrolled full time, a graduate student must be enrolled in at least nine hours in either fall or spring semester and at least three hours during the summer sessions. Full-time enrollment for Graduate Teaching/Research Associate/Assistants (GTAs/GRAs) with a 0.50 FTE appointment is at least six hours in either fall or spring semester and at least two hours during a summer session.

6.3 Minimum and Maximum Enrollment.

Students are required to be enrolled in at least two credit hours in each semester in which they are using University resources (e.g., physical - laboratory, studios; electronic - library holdings; computing; human - faculty, staff). Students holding graduate assistantships should note that additional requirements apply (see below). Regardless of the number of hours taken, a student may not enroll in more than 12 (16 for the Spears

School of Business graduate programs; 24 for the Physician Assistant Studies program) credit hours in the fall or spring semester without permission of the dean of the Graduate College. During the summer session, a student may not enroll in more than nine (15 for the Physician Assistant Studies program) credit hours taken in any session during the eight-week summer period. No more than three credit hours can be taken during the first summer session (intersession). Summer intersession is defined as any course that begins after the end of the spring semester and ends prior to the beginning of the eight-week summer session. For any short course session less than eight weeks in length, enrollment shall not exceed one credit hour for each week.

International students on F-1 or J-1 visas must maintain full-time status (as defined above) during the first semester of enrollment, and during each fall and spring semester thereafter.

Also, see **Section 11.2** for the number of times a course can be used in multiple degree Plans of Study.

6.4 Graduating Semester Enrollment.

Degree-seeking graduate students must be enrolled in at least two credit hours of courses eligible for graduate credit during their graduating semester (defined as the semester in which they satisfactorily complete all degree requirements). However, a student would not need to be enrolled during their graduating semester if they meet all of the following conditions:

1. has been assigned an "Incomplete" (grade of I) in a non-research or creative component course;
2. the course is required for graduation; and,
3. the course in which the incomplete was received is the only graduation requirement left to fulfill.

Students must enroll in research, thesis, or dissertation hours, as appropriate, during each semester in which they are involved in research leading to a thesis or dissertation, irrespective of the number of credit hours of such courses either required or permitted for the degree.

6.5 Master's Degree Enrollment Requirements.

Students with a fall (spring/summer) graduating semester who have research courses (i.e., courses numbered 5000) on their approved Plan of Study must satisfactorily complete no fewer than six hours of courses eligible for graduate credit during the calendar (academic) year which includes the graduating semester. As an example, a student wishing to graduate in a fall semester must be enrolled in a total of at least six hours for that fall semester plus the preceding spring semester and summer session. Doctoral students meet this requirement by virtue of the Doctoral Candidacy Continuous Enrollment Requirements noted below.

6.6 Doctoral Candidacy Enrollment Requirements.

Doctoral students who have completed the requirements for admission to doctoral candidacy and had their "Admission to Doctoral Candidacy" form approved by the dean of the Graduate College may enroll in a minimum of at least two credit hours during any term and be considered full-time. This post-candidacy reduced enrollment option applies to all qualified graduate students, including GTAs, GRAs, international students and veterans receiving VA benefits. A student is normally expected to primarily enroll in research hours or in program-approved courses after being admitted to doctoral candidacy.

Continuous enrollment post-candidacy is required of all students. Enrollment of a minimum of at least two credits per semester is required

for every semester of a student's candidacy (summer session excluded) until graduation. It is ultimately the responsibility of each student to ensure that they meet this enrollment requirement. Students who are not able to maintain active status are strongly encouraged to consult with their program, advisor and the Graduate College to determine whether requesting a Leave of Absence (LOA) is the most appropriate course of action.

6.6.1 Reinstatement Fee.

Post-candidacy students who do not maintain continuous enrollment will be assessed a reinstatement fee based upon their residency status at the time of last enrollment as follows:

- Resident: \$750/semester (summer session excluded) of non-enrollment
- Nonresident: \$1,900/semester (summer session excluded) of non-enrollment

In addition to the reinstatement fee, students whose continuous enrollment disruption exceeds one academic year also must apply for readmission to the graduate program (see Enrollment).

During the readmission process, previous coursework will be evaluated for applicability in accordance with coursework (10 years) and time-to-degree (9 years) time limits (see Time to Degree Requirements).

Notification of the conditions of readmission and reinstatement will be provided if an acceptance occurs. New program requirements may apply based on the aforementioned enrollment policy. Please note that reinstatement and readmission are not guaranteed and significant challenges may occur that hinder a student's ability to complete a degree after a lapse in enrollment, such as the reapplication process (e.g., new letters of recommendation and unexpired standardize test scores); availability of the same graduate advisor, project and/or grant support; and new/revised program requirements and/or core courses for degree.

6.7 Enrollment and Financial Assistance.

For the purpose of receiving monetary assistance through the Office of Scholarships and Financial Aid, the amount of the award is related to the total number of enrolled credit hours that apply toward the degree (for graduate students, such courses must be offered for graduate credit), such as 5000 and 6000 level courses. OSU graduate certificate and master's, specialist and, doctoral degree programs are federal aid-eligible programs, depending on a person's personal circumstances.

In general, a graduate student must be enrolled in four hours of courses eligible for graduate credit each fall and spring semester, and two hours of courses eligible for graduate credit in the summer term, to be eligible for federal financial aid. Some students may be required to enroll in more hours in the fall or spring or summer to receive the full amount of federal financial aid. Students should verify with their financial aid advisor in the OSU Office of Scholarship and Financial Aid about the number of hours they are required to take. Certifiable enrollment status, based upon a combination of enrollment and employment, only assists with the deferral of loan repayments, never qualification for aid, which is based solely on enrollment.

6.8 Enrollment as a Non-Degree Seeking or Degree-Seeking Graduate Student.

Students with a bachelor's degree are expected to enroll in the Graduate College unless they want to obtain another bachelor's degree. If they

enroll as an undergraduate student, the courses taken cannot be given graduate credit at a later date.

6.9 Graduate Student Enrollment in Undergraduate Courses.

Students admitted to the Graduate College may enroll in, or audit, undergraduate courses or course sections that do not carry graduate credit if approved to do so by their graduate faculty advisor. Such courses cannot subsequently be used as part of a graduate Plan of Study and are not generally covered by graduate tuition waiver programs.

6.10 Undergraduate Student Enrollment in Graduate Courses.

An OSU undergraduate senior may take a limited number of courses for graduate credit toward an OSU degree program. Undergraduates admitted to an approved OSU accelerated master's degree program may utilize some of these credits for both a baccalaureate degree and graduate degree as outlined in section 11.15 of the Graduate College section of the University Catalog. All other undergraduates are subject to the graduate credit rules below.

The credits may not be utilized for both a baccalaureate degree and a graduate degree. The courses in question must be approved for graduate credit (as listed in the Course Catalog). The applicability of such graduate courses to a specific graduate program will be determined by the student's graduate advisory committee when the student enrolls in the Graduate College and submits a Plan of Study for an advanced degree.

To receive graduate credit for hours taken when not admitted to an approved OSU accelerated master's degree program, a Graduate Credit for Seniors form must be completed by the student to receive graduate credit for courses taken. This form must be submitted prior to the end of the second week of class instruction of a regular semester, or the first week of a regular summer session. The required form is available on the Registrar's website or upon request to grad-i@okstate.edu.

Such credit may be earned only if the following conditions are satisfied at the time of application:

1. Students must have a minimum overall (cumulative graduation/retention) undergraduate GPA of 3.00.
2. The total semester enrollment must not exceed 18 credit hours for a regular semester or nine credit hours for a summer session.
3. The student must be within 12 semester credit hours of completing requirements for the baccalaureate degree at the beginning of the semester or summer session in which courses are taken for graduate credit.
4. Admission to courses taken for graduate credit must have approval of the course instructor, the dean of the disciplinary college associated with the student's major, and the dean of the Graduate College.

No more than 15 semester credit hours taken while a senior may be approved for graduate credit. The student must earn a grade of "B" or higher in those courses for which he or she seeks graduate credit. Students are cautioned that institutions other than OSU may or may not allow courses taken for graduate credit during the senior year to be transferred into one of their graduate degree programs.

7.0 Time to Degree

Graduate College matriculation starts when a student first enrolls as an admitted, degree-seeking graduate student. That date will be used in calculating time limits for degree completion.

Students are expected to complete the degree requirements from first enrollment after admission within the following time limits: five years for a graduate certificate degree program, seven years for a master's or specialist degree program, and nine years for a doctoral degree program. After that time, a student must submit a written petition to the Graduate College requesting an extension of time-to degree limits. Credit for all courses on a graduate Plan of Study must have been awarded within ten years of completion of all degree requirements. Any exception to these time limits must be approved by the dean of the Graduate College.

7.1 Leave of Absence.

OSU graduate students are expected to maintain active status through continuous enrollment from the time they matriculate until they graduate. Students who are not able to maintain active status are strongly encouraged to consult with their program, advisor, and Graduate College to determine whether requesting a Leave of Absence (LOA) is the most appropriate course of action. International students must consult with the International Students and Scholars (ISS) office to ensure compliance with Federal immigration policy. Example situations that may lead a student to explore a Leave of Absence request are medical, personal, employment, and military service. Students who do not have an approved leave of absence and are not continuously enrolled may experience negative consequences related to academic, visa, financial aid, and other student issues – see University policies and guidelines for additional information. A student status of “good standing” (academic and conduct) is generally required for a Leave of Absence. Please see <https://gradcollege.okstate.edu/resources/current-student-resources.html> for additional Leave of Absence information.

8.0 Enrollment Procedure

Students are strongly encouraged to review the course offerings for the upcoming semester prior to attempting to enroll. For more information about enrollment and classes go to <http://my.okstate.edu>.

First semester graduate students must first obtain their advisor's clearance prior to attempting to enroll.

Non-degree seeking students may be granted enrollment clearance through the Graduate College. Non-degree seeking students will be provided assistance with selecting coursework, issues surrounding the transferability of special student credits, applying to degree-seeking programs, and other academic topics.

If the student has not completed a Plan of Study or if this is the first semester as a graduate student, the student should consult with the graduate faculty advisor. The graduate faculty advisor can provide information about required courses, course sequencing, and other information in order to select appropriate courses. The advisor should give approval for course selections prior to enrollment. All graduate students must complete Responsible Conduct of Research (RCR) requirements prior to the submission of a Plan of Study. A student should consult with his or her graduate coordinator as to what these requirements are in his or her graduate program. A Plan of Study will not be approved by the Graduate College until the program has certified RCR completion.

If a Plan of Study has been completed, the student should verify that all planned courses are listed on the Plan of Study. Students should consult with their advisor any time they deviate from courses listed on the Plan of Study. The ultimate responsibility for completing degree requirements rests with the student.

Students who have active academic, financial or advising holds must clear these holds prior to attempting to enroll. Students can view any holds by logging into the Self Service portal at <http://my.okstate.edu>.

8.1 Last Day to Enroll.

Information regarding dates to enroll, when courses begin, and last days to drop are listed in the Class Schedule available at the Office of the Registrar's website at <http://registrar.okstate.edu>.

Generally, the sixth class day of a regular semester or the third class day of the eight-week summer session is the last day a course may be added (nonrestrictive) via the student enrollment system. A short course may be added no later than the first day of the short course.

8.2 Late Enrollment.

Graduate students should enroll prior to the end of the official enrollment deadline for the semester. If they do not, there are limited options to enroll in classes. The options available to the student depend on the number of weeks past the deadline and the student's current enrollment status.

During the second week of fall/spring or first week of the eight-week summer session:

- If a student wishes to add course hours or is not currently enrolled, they must submit a drop/add card or Trial Study signed by their advisor giving permission to enroll.
- If the student is adding a course they must have the instructor's signature on the add/drop card or Trial Study.
- If a student is non-degree seeking, they must have the signature of the dean of the Graduate College and the instructor of the course in which they wish to enroll.

After the second week of fall/spring or first week of the eight-week summer session graduate students may add any course which has not started.

8.3 Other Enrollment.

In order to enroll in a given semester, a student must have received grades for at least six semester credit hours (including "I" and "R" and excluding "W") in the 12 months prior to the beginning of that semester.

9.0 Online and Outreach Courses

Courses offered online are considered equivalent to courses offered through traditional formats. However, some online courses classified as outreach may not be eligible for tuition waivers. Check with the Graduate College for eligibility before enrolling. Any student wishing to enroll in a graduate credit course offered online or through outreach must make application for admission to the Graduate College at OSU. Some limitations apply to McNair Graduate Fellows (see Section 3.9), City Year Scholars (see section 3.10), International students on F-1 or J-1 visas and students on spousal/partner waivers (see Section 3.11).

10.0 Individual Study Credit (formerly Correspondence Education)

OSU does not offer graduate-level courses by individual study (formerly correspondence education) and does not accept credit taken by individual study (formerly correspondence education) toward an advanced degree. Graduate students may enroll in individual study courses (formerly correspondence education courses); however, such courses will not be considered as part of minimum graduate degree or certificate requirements. Tuition waiver programs are not applicable to courses taken through individual study (formerly correspondence study). Courses taken through individual study (formerly correspondence education) do not count toward minimum enrollment requirements for any graduate student.

11.0 Academic Regulations

Also refer to "University Academic Regulations (p. 920)" section in the Catalog.

11.1 Graduate Credit Courses.

Courses numbered 5000 and above are for graduate students. Seniors who have obtained prior approval from the Graduate College may enroll in graduate level courses in accordance with the provisions of "Enrollment" stated earlier.

11.2 Number of Times a Course Can be Used to Earn Multiple Degrees.

Typically, a graduate course can be used in more than one certificate or degree. For example, a student may initially earn a graduate certificate and later use the certificate coursework to earn a master's degree. Similarly, coursework from a master's degree may also be applied toward a doctoral degree. In both cases, the course credit has been used twice in earning the two graduate credentials – the certificate and the master's degree and a master's and a doctoral degree, respectively.

With approved Plans of Study, graduate courses can be used to earn no more than three degrees, (degrees include undergraduate and graduate certificates). This applies to both OSU courses and courses approved for transfer credit. This policy does not refer to the use of zero-ending courses used within a Plan of Study.

11.3 Grades for Thesis (5000) and Dissertation (6000).

The grade of "SR" indicating satisfactory research progress, "UR" indicating unsatisfactory progress, or "IUR" indicating an incomplete (see section 6.2 "Grade Interpretation" in the "University Academic Regulations" chapter of the Catalog) will be assigned to thesis (5000) and dissertation (6000) courses at the end of the semester in which the course is taken. These grades are permanent and have no impact on a student's grade point average, but affect the graduate student's academic standing. Only courses in which a grade of "SR" (or a previously-awarded grade of "R," "A," "B," or "C") is earned may be used toward minimum degree requirements.

11.4 Grades for Creative Component Courses.

The "R" grade can be assigned in a course identified as a creative component portion of a master's degree by a graduate program. The grade of "R" may be assigned if more than one semester is required to complete the creative component. Upon completion of the creative component, the advisor submits a Change of Grade form to have the final grade entered.

11.5 Pass-No Pass Grading System.

Graduate students may take a course utilizing the Pass-No Pass grading system with the consent of their faculty advisors, but courses taken under this system cannot be used on a Plan of Study to meet graduate degree requirements. A student who chooses the pass-no pass option must do so by the last date on which a course may be added. See section 6.6 "Grades and Grading" in the "University Academic Regulations (p. 920)" chapter of the Catalog.

11.6 Pass-Fail Grading System.

Graduate students may take courses utilizing the Pass-Fail grading with the consent of their faculty advisors; however, only a limited number of these hours can be used on a Plan of Study to meet graduate degree requirements and these require advance permission of the dean of the Graduate College. Pass-Fail courses are typically internship, practicum, clinicals, seminar, special problems and student teaching. See section 6.7 "Grades and Grading" in the "University Academic Regulations (p. 920)" chapter of the Catalog.

11.7 Minimum Grade Requirements.

A grade-point average of "B" (3.00) is required to maintain good standing as a graduate student and meet requirements for a degree. No course with a grade of "D" or "F" can be used on the Plan of Study to satisfy the degree course requirements. At the graduate level, a grade of a "D" or "F" is a failing grade that can result in dismissal by the dean of the Graduate College, regardless of academic standing. To receive a graduate degree, a student must have a minimum 3.00 GPA in the coursework taken for graduate credit

No course with a grade below "C" can be used as part of the minimum number of semester credit hours required for the graduate degree.

Some programs have more stringent requirements. The graduate program should be consulted concerning minimum grade requirements.

11.8 Annual Review of Student Progress.

The graduate program in which a student is seeking a graduate degree will provide a mechanism for assessing the student's progress toward degree completion at least once annually. If it is determined the student is not to be making adequate progress, then a specific plan to address and correct any inadequacies in progress will be prepared in a written document provided to the student and the dean of the Graduate College annually by June 30. Failure to correct these inadequacies may result in termination from the graduate program and/or Graduate College.

11.9 Academic Progress.

Each semester, the dean of the Graduate College reviews the academic progress of any graduate student who receives a grade of "F", "NP", "C" or lower in a class or "UR" in research. Programs are notified which of their students have received a "C" or lower and of the dean of the Graduate College's academic progress decision. At the discretion of the dean of the Graduate College, one of four actions based on the student's current semester performance and past academic history will be taken as follows:

1. Program Notice. The graduate program is notified and is encouraged to review the student's performance to determine if any program intervention is needed.
2. Academic Probation. If a student's overall GPA drops below a 3.00, if a "F", "NP", or "UR" grade is earned, or if the dean of the Graduate College judges the student's overall academic performance so warrants then they are subject to being placed on academic

probation. At the discretion of the dean of the Graduate College, probation may be removed at the end of the semester only after the student brings his or her cumulative GPA for courses eligible for graduate credit taken at OSU to 3.00 or greater, earns a "P" or "SR" grade, and/or completes all degree requirements, whichever comes first.

3. No Further Enrollment Without Program Consent (NFEWPC).
 - a. If the student was admitted on academic probation and did not meet the requirements of this admission, or
 - b. If they have received two consecutive grades of "F", "NP," and/or "UR", or
 - c. If the student was on academic probation the previous semester, or
 - d. If the dean of the Graduate College believes the student's overall academic performance warrants program intervention, then the student is not permitted to enroll further without the consent of the program. To continue in the program, the student must submit a written petition to the dean of the Graduate College requesting reinstatement and outlining a plan to remedy the academic situation. This petition must be accompanied by a letter of support from the unit head or graduate program coordinator. Failure to submit such a reinstatement petition could result in the cancellation of any pre-enrollment for the upcoming semester.
4. No Further Enrollment (NFE). The student has consistently performed below the acceptable standards for graduate students. The student is not permitted to continue graduate study at OSU.

11.10 Course Grade Appeals.

A student may appeal a grade given by an instructor in a case in which they believe the grade awarded is inconsistent with the announced grading policy. The student should consult the "Student Rights and Responsibilities" or contact the Office of Academic Affairs for information regarding initiating the appeals process.

11.11 Appeals of Research Grades and Non-grade Issues.

A student wishing to appeal a "UR" grade issued for a research course (5000 or 6000), or an academic issue not involving a grade should contact the dean of the Graduate College about the appeals process available to graduate students.

11.12 Advisory Committee Decisions-Criteria for Passing.

In decisions resulting from a vote of a graduate student advisory committee (e.g., PhD candidacy exam, final thesis defense, or approving a dissertation), a pass requires that no more than one member of the committee dissent. Graduate programs may impose more stringent requirements.

11.13 Discontinuance from a Program.

In instances when a student reaches a situation when it is no longer possible to complete the intended degree (e.g., failure of all permitted attempts of the PhD qualifying exam, comprehensive exam or candidacy exam), and is still in good academic standing with the Graduate College, a domestic student may be considered for transfer to non-degree seeking student status and be subject to all non-degree seeking student rules (including maximum number of hours that can later be used toward a graduate degree or certificate program). If visa restrictions prohibit the student's matriculation as a non-degree seeking student, the Graduate

College will inform the Office of International Students and Scholars of the student's impending dismissal from the program; the student will have until the end of the semester to be admitted into another graduate program. This change in status is initiated with a letter from the unit head or graduate program coordinator to the student, copied to the dean of the Graduate College, and should detail the reasons for the student's potential dismissal from the program. In accordance with graduate program policies, students have a limited number of days from the intent to dismiss letter date to initiate the appeals process in the program. Graduate students should contact the dean of the Graduate College about the appeals process.

11.14 Second Graduate Degrees.

The Oklahoma State Regents for Higher Education (OSRHE) do not allow students to obtain a second degree in the same "major" as the first degree, even if the options are different. For example, it is not possible to earn both an M.S. degree in Electrical Engineering with an option in Control Systems and an M.S. degree in Electrical Engineering with an option in Optics and Photonics.

Completion of requirements for more than one option may be noted on the official transcript, but a second degree will not be awarded. Additionally, because of the OSRHE requirement for a coursework common core within master's degree options, it should not be assumed that obtaining an additional option within the same degree program and level will be possible. Careful discussions and planning with the Graduate Program Coordinator prior to admission is imperative, if such study is desired.

While graduate and professional students may simultaneously pursue more than one degree and/or certificate, pursuing a second Ph.D. degree is not allowed without preapproval of the dean of the Graduate College prior to the application for admission. Given Ph.D. degrees are research degrees, earning a second Ph.D. degree is highly unusual.

11.15 Accelerated Master's Degree

Accelerated master's degree programs offer a streamlined path to a master's degree, reducing the time to earn a master's degree by sharing up to 30 percent of the coursework required for the stand-alone master's degree with the undergraduate degree. All shared courses must be approved for graduate credit. For example, a 30-hour master's degree may share 9 hours with the undergraduate degree, while a 45-hour master's degree may share 14 hours. The curriculum of an accelerated master's degree program is designed to fulfill all requirements of both the undergraduate and graduate degrees. Accelerated bachelor to master's degree programs require approval of the deans of the Graduate College and the relevant undergraduate college(s).

11.16 Awarding of Certificates and Degrees

The retroactive awarding of a newly approved graduate degree or certificate for prior coursework is prohibited. The majority of the coursework for a graduate certificate must be completed after the student is admitted to and enrolled in the degree program.

11.17 Theses and Dissertations

All students theses and dissertations and derivatives of these works are considered Personal Works under Section 7.02 of OSU's IP Policy 1-0202, and the student will own the copyright unless otherwise provided by the IP Policy. The University, however, retains a non-exclusive, irrevocable, royalty-free license to reproduce, distribute, and publish the works for any purpose without appropriate attribution.

12.0 Responsible Conduct of Research

All graduate students must complete Responsible Conduct of Research (RCR) training requirements prior to the submission of a Plan of Study. Students should consult with their graduate program coordinators as to what these requirements are in their graduate programs. Graduate programs may impose more stringent requirements. A Plan of Study will not be approved by the dean of the Graduate College until the graduate program has certified RCR completion. Information and University policies regarding RCR can be found at <https://research.okstate.edu/compliance/policies.html>.

12.1 Research Involving Human Subjects.

If the thesis, dissertation, formal report or creative component involves the use of human subjects, the research project is governed by federal regulations that require review by the OSU Institutional Review Board (IRB). Approval to conduct the research must be obtained from the IRB before the research is started.

Failure to obtain IRB approval will result in the University's rejection of the thesis, dissertation, or formal report. While the Graduate College does not monitor degree capstone/creative components, this does not negate the student's responsibility to obtain IRB approval if human subjects are involved in that capstone/creative activity.

This section is meant to be informational only and does not contain a complete description of the IRB review process. All of the forms and guidance for completing the application are available on the IRB website <https://research.okstate.edu/compliance/irb/forms.html>.

13.0 Graduation Clearance Process

At the time of enrollment for the last semester or summer session of work toward a degree, graduate students must complete and submit a Graduation Clearance form to the Graduate College before they can submit an Application for Diploma with the Office of the Registrar. The Graduation Clearance form is completed in conjunction with the academic advisor and confirms that a student has met or will meet by the end of the semester in question, all program and Graduate College requirements to earn the degree they are seeking. If these requirements are not met, the student must complete a new Graduation Clearance Form and Application for Diploma for a future semester. In order to allow opportunity for any class schedule changes necessitated by the review of the Graduation Clearance Form, this form and the Application for Diploma, should be submitted as early as possible in the graduating semester but no later than the deadlines listed on the Graduate College website.

13.1 Graduate Commencement and Diplomas.

The University holds one Graduate Commencement Ceremony at the close of the fall and spring semesters. Students who plan to meet graduation requirements at the close of the summer session are invited and encouraged to participate in the Graduate Commencement Ceremony at the close of the previous spring semester or return for the next ceremony on the fall. Although attendance is not compulsory, the University encourages all candidates for advanced degrees, including certificates, to participate in the Graduate Commencement Ceremony. Candidates should also notify the Office of the Registrar of the address to which the diploma should be mailed.

13.2 Graduate Records and Transcripts.

All permanent records are in the Office of the Registrar. Requests for grades, transcripts, diplomas, and degree-completion letters should be made to that office.

A graduate student who does not complete the requirements in time to receive the degree at the end of the semester may secure a statement from the Office of the Registrar when all requirements for the degree have been satisfied. Such a statement will not be issued until all grades for the semester have been recorded.

14.0 Graduate Programs Offered At OSU-Tulsa, Greenwood Campus

OSU offers several graduate degrees and courses in Tulsa. All courses offered by OSU-Tulsa are considered resident credit for degrees granted by OSU. Both current and prospective graduate students are encouraged to utilize the OSU-Tulsa Graduate Student Services, located in North Hall 130. To schedule an appointment with an advisor or to learn more about a graduate program in Tulsa, call 918-594-8445 or email tulsa.gradinfo@okstate.edu. The graduate degree, graduate certificate and certification programs that OSU offers in Tulsa can be found at <http://www.osu-tulsa.okstate.edu/programs#graduatedegrees>.

15.0 Graduate Programs Offered at the OSU Center for Health Sciences in Tulsa

OSU offers specialized graduate programs in athletic training (MAT), biomedical sciences (MS, PhD, and dual degree s DO/MS and DO/PhD) forensic sciences (graduate certificates, MS and Ph.D.); health care administration (graduate certificates, MS, and dual-degrees MS HCA/MBA), global health (MS and dual-degree MS GH/MBA), medical sciences (graduate certificate), and physician assistant studies (MS) through the OSU Center for Health Sciences (CHS).

15.1 Athletic Training.

The Master of Athletic Training (MAT) graduate program in the School of Allied Health at OSU Center for Health Sciences prepares individuals to become competent and independent clinicians who will enhance the quality of patient health care and advance the profession of athletic training through practice and research. The MAT program is accredited by the Commission on Accreditation of Athletic Training Education (CAATE) and offered on campus. Once accepted into the program, students supervised by a Board of Certification (BOC) Certified Athletic Trainer (AT) or other healthcare provider where they are responsible to provide for the overall health care of patients over the course of their respective seasons or occupation. Clinical instruction of students is achieved through direct supervision of a licensed healthcare provider.

The curriculum is based in the human sciences with anatomy, physiology, biomechanics, pathology, pharmacology, nutrition and psychology providing the theoretical foundation of student inquiry. Students learn how to apply these theoretical concepts while in the clinical setting learning under licensed physicians, athletic trainers, physical therapists and other allied health care professionals. This balance of theory and practical application prepares students to sit for the Board of Certification examination where upon successful completion, may earn the credentials ATC.

15.2 Biomedical Sciences.

The MS and PhD programs in biomedical sciences are interdisciplinary programs involving the basic biomedical science disciplines of anatomy,

biochemistry, cell biology, microbiology, pathology, pharmacology and physiology. The programs consist of core basic sciences medical courses, additional basic sciences graduate courses, research, and thesis for the MS and a dissertation for the PhD. A non-thesis MS is also available. All degree programs are offered on campus.

15.2.1 Medical Sciences.

The Graduate Certificate in Medical Sciences is an academic credential earned after completing a one-year program of focused study. It is designed to prepare students to become more qualified applicants to medical school, master's and doctoral programs; or serve as a standalone educational achievement to assist in career development.

15.3 Forensic Sciences.

The graduate program in forensic sciences is interdisciplinary and reflects a broad range of disciplines. The School offers a graduate certificate, MS, and PhD degrees. The graduate certificate in forensic arson, explosive, firearms and toolmarks investigation is offered in a hybrid format, incorporating both on campus and online components. The master's degree program has non-thesis (forensic investigative sciences; arson, explosive, firearms and toolmarks investigation) and thesis (forensic biology/DNA; forensic chemistry/toxicology; forensic psychology) specializations. The master's degree specializations are offered on campus, hybrid and/or online. The PhD program is offered in a hybrid format. Admission to some degree programs in forensic science require specific professional qualifications.

15.4 Health Care Administration.

The School of Health Care Administration trains leaders to guide hospitals, clinics, nursing homes and other health organizations. The MS is ideal for those who want to move into management or executive positions in health care and is offered online, on-campus and hybrid. Well-qualified applicants may be admitted to dual-degree program with the master of business administration (MBA).

The health care administration program requires students to take core courses in health care administration and research methods along with a series of electives selected from applicable courses in business and social sciences. The multidisciplinary approach to the health care administration discipline provides students with a unique perspective on the complex issues facing the profession today.

15.4.1. Global Health.

The MS in global health is offered online and the curriculum is prescriptive in order to provide the student with adequate preparation to enter either a governmental, non-profit or academic career setting. The global health program requires students to take core courses in global health relief and development, international health systems, and emerging global infectious diseases along with a series of electives in global environment and occupational health, health aspects of disasters, and other problems and issues in global health. Well-qualified applicants may be admitted to the dual-degree program with the master of business administration (MBA).

15.5 Physician Assistant Studies.

The M.S. in Physician Assistant Studies at the Center for Health Sciences recruits, educates and mentors a diverse group of students to increase competent and compassionate health care with an emphasis on increasing access to healthcare in rural and medically underserved Oklahoma.

The program places an importance on fostering collegial relationships among students within the Physician Assistant, Osteopathic Medical

and Athletic Training disciplines to provide professional, flexible, team-based health care.

The graduate program in physician assistant studies is designed for students to be eligible for certification as a Physician Assistant. The PA program has a directed curriculum of 124 hours. All students are required to be enrolled full-time. Students will spend 13 months in the didactic phase of education where they will receive traditional lectures as well as many hands-on experiences in laboratory and simulation settings. The second phase of training includes 15 months of clinical rotations. Students are required to have experiences in family, internal, and emergency medicine.

16.0 Interdisciplinary Graduate College Programs

OSU has a series of interdisciplinary graduate programs designed to provide students with a breadth of knowledge that is not ordinarily found in traditional programs. Descriptions are given below for the following interdisciplinary programs: Environmental Science (MS, PSM, PhD), Food Science (MS, PhD), Interdisciplinary Studies (MS), Global Studies (MS), and Public Health (MPH).

16.1 Environmental Science.

Scott Stoodley, PhD—Director
Ken Ede, PhD—Director, Professional Science in Environmental Management, OSU-Tulsa
Kavina Eksteen—Program Coordinator

The Environmental Science Graduate Program (ESGP) is operated under the administration of the Graduate College at OSU. Due to its interdisciplinary nature, ESGP attracts and produces students capable of thinking beyond a single discipline. Our unique approach to graduate education offers flexibility with locations in Stillwater and Tulsa. Our program is one of the oldest programs in the nation having been founded back in 1977. ESGP graduates have gone on to have careers in every facet of the environmental field, including industry and academia.

The program has a non-thesis, industry-oriented, Professional Science Master's (PSM) degree in environmental management offered on the Tulsa campus. On the Stillwater campus, the program offers research-based master's and doctoral degrees. Students have a unique opportunity to develop a degree plan that specifically addresses their individual career goals. Degree integrity is ensured through the guidance of the student's graduate faculty mentor and advisory committee.

Our doctoral students are housed in one of many departments including Agricultural Economics, Economics, Leisure Studies, Plant & Soil Sciences, Natural Resources Ecology & Management, Biosystems and Agricultural Engineering, Geology, Geography, Political Science, Educational and School Psychology, School of Teaching and Curriculum Leadership, Sociology, and Zoology. There are over 128 faculty affiliated with ESGP at OSU and over 70 of these have served as faculty advisors.

16.1.1 Programs of Study.

The breadth of offerings at OSU affords flexibility to the student interested in specific environmental career tracks. A student can design a unique degree plan to target a particular focus area that meets his or her professional goals or can follow structured plans recommended for specializations in:

- Environmental Management, Environmental Management-Professional Science Masters (PSM), Environmental Education,

Environmental Policy and Conflict Management, Environmental Sustainability, Environmental Chemistry-Toxicology and Risk Assessment, and Water and Watershed Management.

The student's graduate advisory committee assists the student in preparing a Plan of Study to assure focus, breadth and quality. Students can also use their degree to pursue industry-specific job opportunities.

16.1.2 Program Assessment Portfolio.

The ESGP assesses its curriculum each year to ensure that students are receiving the instruction needed to succeed in environmental careers.

16.1.3 Master of Science Degree.

To obtain an MS degree in environmental science, the student must complete a 30- or 33-credit hour course of study. This must include fifteen hours of core curriculum (ENVR 5303 Issues in Environmental Sustainability, ENVR 5123 Environmental Problem Analysis, three hours in research methods or statistics, three hours in social science and three hours in natural science). Each student must also either complete a six-hour research thesis, a three-hour research report, or a creative component. The remaining credit hours can be taken as electives that focus on the student's area of particular interest. Students create their original Plans of Study with the assistance of their advisor and committee. It must be completed prior to the end of the second semester (excluding summer sessions) of enrollment.

16.1.3.1. Professional Science Master (PSM) Option in Environmental Management.

The PSM-MS option requires students to complete 33-credit hours. The core requirements include ENVR 5123 Environmental Problem Analysis; ENVR 5303 Issues in Environmental Sustainability; and ENVR 5510 Environmental Management Internship. The PSM-MS option offers a springboard to industry-specific job opportunities. To obtain a non-thesis, industry-focused MS degree recognized by the Commission on Affiliation of PSM Programs students take 21 credit hours of science courses in addition to PSM-MS core curriculum requirements.

16.1.4 Doctor of Philosophy Degree.

The PhD degree requires a minimum of 60 credit hours beyond an MS degree. This includes a minimum of 36 to 45 hours of coursework consisting of six hours of a skill component, ENVR 5303 Issues in Environmental Sustainability, ENVR 5123 Environmental Problem Analysis, and ENVR 6011 Survey of Environmental Science. Course hours should reflect the biological, social, and physical aspects of the concentration area. Research and courses should reflect the student's professional goals. A dissertation (ENVR 6000 Doctoral Research for Dissertation) is required and consists of a minimum of 15 credit hours. The student must successfully pass a written and oral qualifying exam after coursework is completed. Students create their original Plans of Study with the assistance of their advisor and committee. It must be completed prior to the end of the third semester (excluding summer sessions) of enrollment.

16.1.5 Admission.

Each student seeking admission to the Environmental Science Graduate Program must submit the following materials:

1. An official Graduate College application for admission and a nonrefundable fee,
2. Official transcripts for all college level courses,
3. A statement of career goals, including competencies to be gained during program enrollment,

4. Three letters of recommendation discussing the student's potential for graduate work.

International students must also earn a TOEFL score of at least 90iBT/577PBT or PTE academic test score of at least 53, or IELTS academic stream score of at least 6.5 and submit a financial affidavit for the amount required by OSU. To be admitted, applicants must have earned a college grade-point-average of 3.00 on a 4.00 scale. Students are required to have completed college-level courses that address the fundamentals and principles of chemistry, biology, ecology, and algebra prior to admission.

All applications to the ESGP should be submitted at least 60 days before the opening of the semester in which they wish to enroll. International students should supply all application materials by March 1st for summer enrollment, June 1 for fall enrollment, and October 15 for spring enrollment.

It is recommended that students identify an advisor prior to admission to the program. The ESGP Program Coordinator will assist the student with this process. If the student is unable to identify a permanent advisor, then a temporary advisor may be appointed. However, the student must identify a permanent advisor prior to completion of the ninth credit hour in order to be able to enroll in the following semester.

16.1.6 Financial Assistance.

Graduate research assistantships and other funding opportunities are often available through affiliated environmental science faculty members. The initial application should specify the student's interest in an assistantship.

Additional information about the environmental science graduate program can be found at esgp.okstate.edu (<http://esgp.okstate.edu>).

16.2 Food Science.

William McGlynn, PhD—Program Coordinator

The following departments participate in the food science program: Agricultural Economics, Animal Science, Biochemistry and Molecular Biology, Biosystems and Agricultural Engineering, Entomology and Plant Pathology, Horticulture, Plant and Soil Science, and Nutritional Sciences.

Food science is an interdisciplinary graduate program designed to provide an opportunity for students to acquire basic knowledge of the food industry encompassing the biological and physical sciences. The increasing complexity of the problems involved in the safe and secure production, processing, and utilization of food requires us to expand our fundamental knowledge to solve these problems. There is a great demand for personnel with advanced training in the broad area of food science to staff research, production, food safety and quality assurance positions in industry, universities and government

Admission to either the MS or PhD degree program requires an undergraduate major in animal science, biochemistry, dairy science, food science, human nutrition, microbiology or poultry science. Students majoring in other curricula may qualify by remedying specific undergraduate deficiencies as recognized by the student's graduate committee. A student enrolling in a degree program must have been accepted by an advisor prior to official admission.

The GRE is required for admission, no minimum score is required. Three letters of reference and a personal statement of purpose are also required.

16.3 Interdisciplinary Studies.

Mary Jo Self, EdD—General Program Coordinator

The MS in Interdisciplinary Studies offers students the flexibility to create a program of study to fit background, experience and career goals. By stacking graduate certificates and/or other focused graduate coursework, students can tailor their degree to make the most of their education. The MS is for students who wish to increase their competence in a particular thematic area(s) by taking a series of courses in several disciplines. This multidisciplinary approach provides educational opportunities leading to a variety of careers. Interdisciplinary studies consist of no fewer than two separate fields of study. The advisory committee will assist the student in formulating the Plan of Study.

16.3.1 Admission Requirements.

An undergraduate grade-point average of 3.00 is required for unqualified admission. Students with a grade-point average between 2.50 and 3.00 may be admitted on a probationary basis.

Applications to the program should include:

1. a cover letter indicating the personal goals and professional objectives to be obtained from the program;
2. transcripts from all schools previously attended;
3. three letters of recommendation from persons who can describe abilities, interest, and motivation as a student;
4. a proposed course of study with an endorsement from an OSU faculty advisor.

Particular courses are not specified for the degree; the advisory committee can assist in selecting appropriate courses. Up to nine graduate hours can be transferred from a regionally-accredited graduate program with consent of the advisory committee. The student chooses one of the two master's degree plans:

1. 30-hour plan, thesis, includes six-hours of research;
2. 32-hour plan, non-thesis. May include a culminating experience (e.g., internship, practicum, comprehensive exam, portfolio, or capstone project); may include a final report with no more than three hours of research;

16.4 Public Health.

Jean Van Delinder, PhD—Interim Program Director

Randolph Hubach, MPH, PhD - Associate Director

The Master of Public Health (MPH) is an interdisciplinary degree program and focuses on training public health professionals to improve health and wellbeing of rural and underserved populations. Students are encouraged to identify a rural community or underserved population as the focus of class projects. In doing so, students will have the opportunity to assess the needs of that community or population, and to thoughtfully create programs for preventing disease within that community or population. Prevention efforts often include a focus on lifestyle and health behaviors. Current students study health behaviors and health outcome areas that include: the use of alcohol, tobacco, other drugs, mental health, disabilities, zoonotic diseases, nutrition and food security, obesity, physical activity, maternal and child health, teen pregnancy and sexual health. These students are meaningfully engaged with rural communities throughout Oklahoma and underserved populations that include indigenous populations, racial minorities, recent immigrants, and sexual minorities.

16.4.1 Admission Requirements.

Application for admission includes a statement of purpose defining professional goals and interest in public health, a resume, and three letters of reference.

17.0 Graduate Certificate Programs Offerings

Graduate certificate programs offer students the opportunity for focused study of a body of knowledge at the graduate level, leading to the award of a transcribed academic credential that can be earned in a relatively short time. Graduate certificate programs can serve both as a stepping stone onto more advanced study leading to a master's or doctoral degree or as a stand alone educational achievement to assist an individual in their career. Many OSU graduate certificate programs are offered online or on the graduate-serving campuses (OSU-Stillwater, OSU-Tulsa and OSU-Center for Health Sciences in Tulsa). In addition, many graduate certificate programs allow students to enroll as either a certificate-seeking or a degree-seeking graduate student. Certificate-seeking students are not eligible for GTA or GRA positions or associated benefits, but may be eligible for federal financial aid. For the current graduate certificate offerings at OSU please see the Graduate College website for additional information.

17.1 Admission to a Graduate Certificate Program.

Any student admitted to the Graduate College may apply for admission to a graduate certificate program. Some certificate programs may have additional requirements, such as official scores on standardized tests, letters of recommendation, etc. Contact the appropriate graduate program for specifics.

17.2 Basic Requirements.

A graduate certificate requires completion of a minimum of 12 credit hours of coursework eligible for graduate credit. Specific certificate programs may have more stringent requirements.

Also, see **Section 11.2** for the number of times a course can be used in multiple degree Plans of Study.

17.3 Transfer of Courses.

With the approval of the graduate program and the Graduate College, up to three hours of graduate-level credit from another institution may be used toward certificate requirements. The GPA must be at least 3.0 on any transfer credit.

17.4 Academic Standing.

A grade-point average of "B" (3.00) is required on courses applicable to a graduate certificate. No grade lower than a "C" may be used as part of the minimum requirements for the certificate. Individual certificate programs may have more stringent requirements.

17.5 Plan of Study and Certificate Completion Procedures.

Upon application to a graduate certificate program, a student should complete a Plan of Study listing the courses intended to be used in earning the certificate. This plan must be approved by the graduate program and the Graduate College prior to recording the credential on the student's academic record. During the semester of anticipated certificate completion, the student must complete an Application for Certificate Completion, which is submitted to the Office of the Registrar. This action

will cause the graduate certificate to be recorded on the official transcript and a certificate will be printed, provided all requirements have been met.

17.6 Special Program – Certificate Program in Education.

OSU offers Oklahoma State Department of Education-approved post-bachelor's certification programs for elementary school principals, school counselors, reading specialists, library/media specialists, and secondary school principals. Certification is also offered in speech and language pathology and in special education.

Master's degrees are available in most of these programs and doctorates are available in many.

Post-master's level certification programs are available for school superintendents and school psychologists.

Inquiries concerning any aspect of the Professional Education program should be addressed to the Office of Professional Education at 405-744-6252 or the head of the unit/department/school offering the program.

18.0 Graduate Minors

Graduate minors offer students the opportunity to pursue coursework outside, or ancillary to, the requirements for the degree earned. Minors may not be earned independently of a degree granted by OSU. OSU offers graduate minors in the following areas:

- Agribusiness
- Agricultural Economics
- Entomology
- Plant Pathology
- Statistics

18.1 Basic Requirements.

A graduate minor must include between nine and eighteen hours, inclusive, of coursework eligible for graduate credit.

Transfer of courses: No more than one-third of the credit for the minor may be earned through transfer credit of courses taken at other institutions, with the approval of the coordinator of the minor and the dean of the Graduate College. Transfer credit will only be considered if it was earned when the student was post-baccalaureate (i.e., after earning a bachelor's degree) at another accredited institution. All courses used as transfer credit must have a grade of "B" or better. Grades earned in courses transferred to Oklahoma State University will not be used in calculating the cumulative GPA.

18.2 Academic Standing.

A grade-point average of "B" (3.00) is required on courses applicable to a graduate minor. No grade lower than a "C" may be used as part of the minimum requirements for the minor. Individual minors may have more stringent requirements.

18.3 Plan of Study and Minor Completion Procedures.

Graduate students can declare a minor by entering it in the appropriate section of an original or revised Plan of Study submitted to the Graduate College prior to conferral of the degree. The pursuit of graduate minors is not denoted on the academic transcript while in progress. Graduate students can file for minor completion in the semester that the required courses for that minor will be finished. At that time, the graduate

student should ask the coordinator for that minor area to submit a memorandum to the Graduate College certifying the completion of the minor requirements and listing the courses required for the minor. A notation of the minor will be added to the student's transcript with the conferral of a degree. The courses required for a graduate minor may be included on a Plan of Study for any graduate degree or they may be in addition to the degree requirements, depending on the overlap between the minor and the degree Plan of Study. However, the graduate minor must be earned in an academic field other than the student's graduate program or degree option (for example, a graduate student who is majoring in economics could not receive a graduate minor in economics).

18.4 Time Limits.

Requirements for the graduate minor must be completed at the time of conferral of the primary degree. All graduate courses used to complete the minor must have been taken within ten years prior to the date of completion of the graduate minor requirements.

19.0 Master's Degree Programs

19.1 Abbreviations.

MA - Master of Arts
 MAG - Master of Agriculture
 MAT - Master of Athletic Training
 MBA - Master of Business Administration
 MEN - Master of Engineering
 MFA - Master of Fine Arts
 MM - Master of Music
 MPH - Master of Public Health
 MS - Master of Science

19.2 Current Degree Inventory.

For the current listing of master's degrees offered at OSU see the Graduate College website: <https://gradcollege.okstate.edu/programs/listing-by-degree.html#Masters>.

19.3 Basic Requirements.

The master's degree may be earned by one of two plans as follows:

Plan I—coursework with thesis. Minimum 30 credit hours consisting of 24 hours of coursework and 6 hours of research or creative component with a grade of "SR."

Plan II—coursework without thesis. Minimum of 32 credit hours. May include no more than three hours of research or creative component with a grade of "SR." May include culminating experiences (e.g., formal report, final report, internship, practicum, comprehensive exam, portfolio or capstone project).

The numbers of credits specified for each plan are minimums set by the Graduate College. Graduate program requirements may exceed these minimums.

The graduate program, with the approval of the dean of the Graduate College, decides which alternatives are open to the students.

A student who holds a DVM, MD, DO, DDS, LLB, JD, or equivalent professional degree may receive up to nine hours credit toward a master's degree, subject to the recommendation of the advisory committee and the approval of the dean of the Graduate College. However, a student

receiving this credit may not transfer additional hours to OSU from other graduate programs.

Also, see **Section 11.2** for the number of times a course can be used in multiple degree Plans of Study.

19.4 Residency Requirements.

Candidates for a master's degree must complete a minimum of 21 semester credit hours from OSU if they follow Plan I, or 23 semester credit hours if they follow Plan II. Nine semester credit hours of the 30 or 32 required for the degree may be graduate courses taken at another accredited college or university with appropriate approvals.

19.5 Advisory Committee.

Upon recommendation of the graduate program and approval of the dean of the Graduate College, an advisory committee of no fewer than three voting members will be appointed. The advisory committee must include a minimum of three members of the Graduate Faculty. The chair of the committee need not necessarily serve as the student's research advisor, but must hold an OSU Graduate Faculty appointment and have familiarity with the academic requirements of the degree sought. To view the roles and responsibilities associated with members of advisory committees, go to <https://gradcollege.okstate.edu/resources/best-practices.html>.

19.6 Level of Courses Applied to Graduate Degree.

Graduate students must complete all semester credit hours at the 5000- and 6000-level courses through OSU as presented on the Plan of Study to meet requirements for the master's degree.

19.7 Plan of Study.

The Plan of Study for the degree must be submitted online to the Graduate College prior to completion of the second semester of enrollment for a master's program. The student should develop the Plan of Study with the advisor using the online Plan of Study application (<http://planofstudy.okstate.edu>). The online submission request requires approval by the advisory committee and the student's graduate program with final approval by the Graduate College. The Plan of Study is subject to modification. All changes must have the approval of the advisory committee and the student's graduate program coordinator, and a final Plan of Study incorporating all changes should be submitted to the Graduate College by the posted deadline.

Graduate credit, up to a maximum of nine hours, used to obtain one master's degree may, with the approval of the advisory committee, be counted toward completion of another master's degree.

19.8 Major Subject or Field.

A major field of study may cross graduate program lines with approval of the graduate program and dean of the Graduate College.

To receive a master's degree, the student must have completed in the major field of study a minimum of 16 semester credit hours above the prerequisites required for graduate work in that subject or field.

19.9 Language Requirements.

A candidate for a master's degree may be required to demonstrate a reading knowledge of a modern foreign language. Any such requirement of the graduate program included on the Plan of Study and is noted at the time the preliminary plan is approved by the student's advisor.

A foreign language requirement for a master's degree may be met either by examination or by college credit, according to individual graduate program requirements.

19.10 Written Examinations.

Some graduate programs require a written examination covering the major and/or minor fields. It is usually taken before the thesis or report has been completed. Arrangements for taking the examination should be made with the graduate program at least three weeks in advance. The written examination must be passed before a final examination is scheduled, if a thesis or report option is used.

A student who fails all or part of the written examination should consult the chair of the examination committee to find out what must be done before taking another examination.

19.11 Thesis.

Any student working on a thesis should obtain a copy of the Graduate College Thesis/Dissertation Handbook available from the Graduate College at <https://gradcollege.okstate.edu/resources/current-student-resources.html>. A thesis must conform to the format specifications set forth in this document. The style of the document is to be determined by the advisory committee and should be reflective of publications in the student's discipline. All graduate students writing a thesis must attend a Thesis/Dissertation format and graduation review or webinar prior to submission of their final copy. The dates for the reviews are on the Graduate Calendar and a link to the webinar version is available on the Graduate College website.

It is strongly recommended that a graduate student submit complete copies of their thesis to the committee members at least two weeks prior to the defense date, that the defense presentation be publicized, and that the thesis defense occur on a date during the normal academic semesters and sessions. Graduate programs may have additional or more restrictive requirements for thesis defenses.

The student should submit an electronic copy of the final thesis through the OSU electronic submission website. Directions for the website submission are given to the student when they submit the Oral Defense Results Form to the Graduate College. In addition, the student must submit to the Graduate College one paper copy of the approval page with all original signatures and the student's name and eight digit CWID number entered at the top of the page. Both the electronic submission and paper approval page must be received no later than the stated final submission deadline date (see the "Graduate College Calendar" for dates).

19.12 Report.

The student must submit to the Graduate College the Formal Report Approval form.

19.13 Final Examination.

If the thesis or report option is used, the student should arrange with the graduate program for the final examination and to distribute a copy as described in the preceding section. The final examination may be oral or written or both.

The final examination is primarily a defense of the thesis or report. If the defense is judged inadequate, a decision on whether to permit re-examination will be made by the advisory committee. Another examination cannot be given for at least two months after a failure, and

a graduate program may limit the number of times that the examination may be repeated.

The committee will notify the Graduate College immediately of results of the final examination. Following satisfactory completion of the final examination, the candidate will make changes in the thesis or report as required by the committee and by the Graduate College, and submit it in final form signed by the committee to the Graduate College by the semester deadline.

Please see the Graduate College's Best Practices: Advisory Committees and Defenses document for additional guidance (<https://gradcollege.okstate.edu/resources/best-practices.html>).

20.0 Specialist in Education (EdS) Degree Program

The Specialist in Education degree is conferred as an appropriate recognition of achievement as evidenced by the following:

1. Successful professional performance in the area of the student's specialization.
2. Satisfactory completion of a program of graduate study of approximately two academic years.
3. Satisfactory performance on examinations designed to reveal the student's understanding of the field of specialization and its relation to other areas; and
4. Preparation of a thesis dealing with some aspect of concern to the student's profession and its defense before a committee of the Graduate Faculty.

20.1 Temporary Advisor.

At the beginning of a student's Specialist in Education program, the school head will designate a member of the Graduate Faculty to serve as temporary advisor to the student. The temporary advisor will guide the student in the selection of courses for the first semester.

20.2 Advisory Committee.

Upon recommendation of the school head or the graduate committee of the school, an advisory committee of no fewer than three voting members will be appointed by the dean of the Graduate College. At least one member of the advisory committee must be from a school or department outside the student's major field of study. This committee:

1. conducts the preliminary examination and conference,
2. approves the proposed Plan of Study,
3. supervises the student's progress in the program,
4. supervises the research, and
5. arranges for and conducts the final examination.

The chair of the committee need not necessarily serve as the student's research advisor, but must hold an OSU Graduate Faculty appointment and have familiarity with the academic requirements of the degree sought. To view the roles and responsibilities associated with members of advisory committees.

20.3 Plan of Study.

The original Plan of Study for the degree must be submitted to the Graduate College prior to the end of the second semester (excluding summer sessions) of enrollment for a specialist in education program. The student should develop the Plan of Study with the advisor using the

online Plan of Study application. The online submission requires approval by the advisory committee and the student's graduate program with final approval by the Graduate College.

The Plan of Study may be modified with the approval of the advisory committee and graduate program. A final Plan of Study incorporating all changes should be filed in the Graduate College by the eighth week of the semester in which the degree is to be conferred.

20.4 Credit Hour Requirements.

A minimum of 60 credit hours beyond the bachelor's degree or 33 credit hours beyond the master's degree are required for the Specialist in Education degree. This may include as many as 10 credit hours for the practicum study and accompanying report.

Also, see **Section 11.2** for the number of times a course can be used in multiple degree Plans of Study.

20.5 Character of Work.

The satisfactory completion of coursework (see "General Regulations") is only one requirement for receiving the degree. The student must also:

1. pass a qualifying examination,
2. conduct an appropriate study of education,
3. show qualities of professional leadership, and
4. pass a final examination.

20.6 Residence Requirements.

While the Graduate College does not have a specific residence requirement that applies to all graduate programs, programs may require a period of time in residence for students enrolled in departmental graduate programs. Programs must inform students of any residence requirements upon their admission to departmental graduate programs. No more than nine hours may be transferred from another university.

20.7 Qualifying Examination.

A qualifying examination is required of all candidates for the Specialist in Education degree. The nature of this exam is determined within each specialization.

20.8 Credit Toward an EdD or a PhD.

A student holding an EdS may have the credit hour requirements for a PhD or EdD reduced to 30 hours subject to recommendation by the advisory committee and approval of the dean of the Graduate College.

21.0 Doctor of Education (EdD) Degree Programs

The degree of Doctor of Education is a professional degree conferred in recognition of outstanding ability as an educator in some special field or fields as shown by:

1. satisfactory completion of a program of study;
2. passing examinations showing an understanding of the field of specialization and its relation to allied subjects;
3. the preparation of a dissertation demonstrating ability to approach problems with a high degree of originality and independence; and
4. passing an examination covering the dissertation and related fields.

The following EdD degrees are offered:

- Applied Educational Studies (Aviation and Space Education)
- Higher Education
- School Administration

21.1 Basic Requirements.

The Doctor of Education degree requires a minimum of 90 semester credit hours beyond the bachelor's degree, or a minimum of 60 semester credit hours beyond the master's degree in a related discipline. The Plan of Study must include ten hours, with a grade of "SR," for the doctoral dissertation. Students may use 90 hours beyond the bachelor's degree as a degree total only if admitted directly into the doctoral program from the bachelor's degree.

A student who holds a DVM, MD, DO, DDS, LLB, JD, or equivalent professional degree may also have the minimum credit hour requirement reduced to 60 hours, subject to the recommendation of their advisory committee and the approval of the dean of the Graduate College.

A student may receive only one 30-hour credit reduction in the EdD requirement regardless of the number of master's or professional degrees that he or she holds.

Also, see **Section 11.2** for the number of times a course can be used in multiple degree Plans of Study.

21.2 Temporary Advisor.

At the beginning of a student's doctoral program, the school head will designate a member of the Graduate Faculty to serve as temporary advisor to the student. The temporary advisor will guide the student in the selection of courses for the first semester.

21.3 Advisory Committee.

Upon recommendation of the head of the graduate program and approval of the graduate dean, an advisory committee of no fewer than four voting members will be appointed. The duties of the advisory committee consist of:

1. advising the student,
2. assisting the student in preparing a Plan of Study,
3. assisting in planning and conducting the research,
4. supervising the writing of the dissertation, and
5. conducting the dissertation defense.

The chair of the committee need not necessarily serve as the student's research advisor, but must hold an OSU Graduate Faculty appointment with doctoral chairing privileges, and have familiarity with the academic requirements of the degree sought. Each doctoral advisory committee must have at least one member of the Graduate Faculty from outside the student's major department. To view the roles and responsibilities associated with members of advisory committees, go to <https://gradcollege.okstate.edu/resources/best-practices.html>.

The student should consult the members of the advisory committee frequently and keep them informed on the progress of their work.

21.4 Preliminary Conference.

As soon as the student is notified that an advisory committee has been appointed, the student should arrange with the chair for a conference with the committee. During the conference, the preparation and qualifications of the student for graduate work will be discussed and appropriate plans made for future study.

21.5 Plan of Study.

The student should develop the Plan of Study with the advisory committee using the online Plan of Study application. The online submission requires approval by the advisory committee and the student's graduate program with final approval by the Graduate College.

Because the acceptance of work that the student desires to use toward the degree rests with the advisory committee, it is important to plan a complete program and have it approved by the dean of the Graduate College as soon as possible.

The original Plan of Study must be submitted to the Graduate College prior to the end of the third semester (excluding summer sessions) of enrollment in the doctoral program.

The Plan must include all the acceptable graduate work that has been completed and all that will be taken for the degree. The plan should include:

1. all courses taken at the 5000-6000 level,
2. a minimum of 60 hours beyond the master's degree or 30 hours beyond the EdS, and
3. at least 10 hours of dissertation credit. Courses from a master's degree or EdS are not listed on the doctoral Plan of Study.

Credit for all courses on a graduate Plan of Study must have been awarded within 10 years of completion of all degree requirements.

Changes in the Plan of Study can be made with the approval of the advisory committee and the dean of the Graduate College. A final, accurate and approved plan must be filed by eighth week of the semester in which the degree is to be conferred.

21.6 Character of Work.

The satisfactory completion of coursework (see "General Regulations") is only one requirement for receiving the degree. The student must also:

1. pass a qualifying examination,
2. prepare an acceptable dissertation,
3. demonstrate the ability to do independent study,
4. pass a defense of dissertation, and
5. comply with any other requirements of the major department.

21.7 Residence Requirements.

A minimum of 30 credit hours must be taken at OSU. While the Graduate College does not have a specific residency requirement that applies to all graduate programs, some may require a period of time in residence for students. Programs must inform students of any residency requirements upon their admission to graduate programs.

21.8 Language and Research Instruments Proficiency.

All candidates will be expected to have a command of those instruments necessary in the study of educational problems. The doctoral advisory committee of each candidate may require evidence of proficiency in one or more foreign languages, educational research, statistics and/or computer usage.

21.9 Admission to Doctoral Candidacy.

Admission to doctoral candidacy marks the transition into the research phase of a doctoral degree and indicates agreement that the student has demonstrated the ability to do acceptable graduate work and that satisfactory progress has been made toward a degree. Consideration

for candidacy requires the presentation of a written research proposal for doctoral research to the doctoral advisory committee, who will assess the proposal and offer the student pertinent counsel, advice and feedback. The approval of the research proposal by the advisory committee is the basic requirement for admission to doctoral candidacy; individual programs will normally impose additional requirements, such as the successful completion of oral and/or written comprehensive or qualifying examinations. These additional requirements may occur in conjunction with the presentation of the research proposal, or they may occur at different times within the course of doctoral study. Admission to doctoral candidacy is conferred with the approval of the dean of the Graduate College, on behalf of the Graduate Council, acting upon the recommendation of program faculty. Admission to candidacy should occur fairly early in the graduate degree program. It is the responsibility of the chair of the advisory committee to notify the Graduate College when admission to candidacy is granted by submitting the Admission to Doctoral Candidacy form.

21.10 Dissertation Hours Taken as a Doctoral Candidate.

Admission to candidacy must occur at least six months prior to the date of the final dissertation defense. Since admission to candidacy may occur at various times related to the academic calendar, the student will need to be admitted to candidacy early in the fall semester to be eligible to schedule their final dissertation defense and graduate in the spring; very early in the spring semester for summer graduation; and extremely early in the summer session for fall graduation. (See the Graduate College Calendar for term-specific dates.) If a student is admitted to candidacy prior to the first day of a given term, all dissertation hours taken that term and following may be included in the hours of dissertation research required as a doctoral candidate.

21.11 Dissertation.

A dissertation is required of each candidate for the EdD degree. The dissertation has three principal functions:

1. training in research,
2. promoting professional growth, and
3. contributing to professional knowledge in education. Not every dissertation will be expected to serve these three functions in the same way or to the same extent.

The format specifications, procedures and regulations for the dissertation are the same as for the PhD. The EdD candidate should refer to the "Doctor of Philosophy" section in the Graduate College chapter of the Catalog on dissertations and submission procedures through the Graduate College. The style of the document is to be determined by the advisory committee and should be reflective of publications in the student's discipline. Any graduate student writing a dissertation must attend a format workshop prior to submission of their final copy. The dates for the workshops are on the Graduate Calendar and a webinar version is available.

22.0 Doctor of Philosophy (PhD) Degree Programs

The Doctor of Philosophy (PhD) degree is granted in recognition of high achievement in scholarship and independent investigation. The student must prove his or her acceptability by:

1. successfully completing a series of courses comprising a Plan of Study;
2. passing various examinations demonstrating academic competence;

3. carrying out a research program under supervision and preparing an acceptable dissertation; and
4. demonstrating initiative, creative intelligence, and ability to plan and carry out research in his or her chosen field.

22.1 Current Degree Inventory.

For the current listing of doctoral programs offered at OSU see the Graduate College website: <https://gradcollege.okstate.edu/programs/listing-by-degree.html#Doctoral>.

22.2 Basic Requirements.

The Doctor of Philosophy degree requires the number of credit hours as specified by the degree program with a minimum of 60 credit hours beyond the bachelor's degree. These hours must include a minimum of 15 dissertation hours (6000) with a grade of "SR." The maximum number of dissertation hours (6000 with a grade of "SR") permissible on a Plan of Study must not exceed three-fourths of the total credit hours in the approved graduate degree program.

Also, see **Section 11.2** for the number of times a course can be used in multiple degree Plans of Study.

22.3 Temporary Advisor.

At the beginning of a student's doctoral program, the graduate program will designate a member of the Graduate Faculty to serve as temporary advisor to the student. The temporary advisor will assist the student in the early selection of courses. Often, it is the graduate coordinator who serves as the temporary advisor.

22.4 Advisory Committee.

Upon recommendation of the graduate program and approval of the dean of the Graduate College, an advisory committee of not fewer than four voting members will be appointed. The duties of the advisory committee consist of:

1. advising the student,
2. assisting the student in preparing a Plan of Study,
3. assisting in planning and conducting the research,
4. supervising the writing of the dissertation, and
5. conducting the dissertation defense.

The chair of the committee need not necessarily serve as the student's research advisor, but must hold an OSU Graduate Faculty appointment with doctoral chairing privileges, and have familiarity with the academic requirements of the degree sought. Each doctoral advisory committee must have at least one member of the Graduate Faculty from outside the student's major department. To view the roles and responsibilities associated with members of advisory committees, go to <https://gradcollege.okstate.edu/resources/best-practices.html>.

The student should consult the members of the advisory committee frequently keep them informed on the progress of their work.

22.5 Preliminary Conference.

As soon as the student is notified that an advisory committee has been approved, the student should arrange with the chairperson for a conference with the committee. During the conference, the preparation and qualifications of the student for graduate work will be discussed and appropriate plans made for future study.

22.6 Plan of Study.

The student should develop the Plan of Study with the advisory committee using the online Plan of Study application. The online submission requires approval by the advisory committee and the student's graduate program with final approval by the Graduate College.

The original Plan of Study must be submitted to the Graduate College prior to the end of the third semester (excluding summer sessions) of enrollment in the doctoral program. The plan must include all the acceptable graduate work that has been completed and all that will be taken for the doctoral degree.

The Plan of Study must include all the acceptable graduate work that has been completed and all that will be taken for the doctoral degree. The Plan of Study should include:

1. all courses taken at the 5000-6000 level,
2. a minimum of 60 hours beyond the master's degree, and
3. a minimum of 15 (maximum of 45) dissertation hours (6000) with a grade of "SR" for the 60 hour doctorate or a minimum of 15 (maximum of 60) dissertation hours (6000) for the 90 hour doctorate.

Courses used to earn a master's degree are not listed on the doctoral Plan of Study. Credit for all courses on a graduate Plan of Study must have been awarded within 10 years of completion of all degree requirements.

Changes in the Plan of Study can be made with the approval of the advisory committee, graduate program, and the dean of the Graduate College. A final, accurate and approved plan must be filed by the eighth week of the semester in which the degree is to be conferred.

22.7 Character of Work.

The satisfactory completion of coursework (see "General Regulations") is only one requirement for earning the degree. The student must also:

1. pass a qualifying examination,
2. prepare an acceptable dissertation,
3. demonstrate the ability to do independent study,
4. pass a defense of dissertation, and
5. comply with any other requirements of the graduate program.

22.8 Residency Requirements.

A minimum of 30 credit hours must be taken at OSU. While the Graduate College does not have a specific residency requirement that applies to all graduate programs, graduate programs may require a period of time in residence for students enrolled in departmental graduate programs. Programs must inform students of any residence requirements upon their admission to their graduate programs.

22.9 Language Requirement.

Foreign language or other proficiency requirements may be specified to meet the need for specific skills and areas of knowledge that facilitate research and contribute to wider understanding. Specific requirements are determined by graduate programs. In many fields, a reading knowledge of one or two modern foreign languages is an important part of scholarship and necessary for research. In other fields, proficiency in special and related disciplines may be required that will contribute to the needs of the individual program.

22.10 Admission to Doctoral Candidacy.

Admission to doctoral candidacy marks the transition into the research phase of a doctoral degree and indicates agreement that the student has demonstrated the ability to do acceptable, doctoral-level graduate work and that satisfactory progress has been made toward a degree. Consideration for candidacy requires the presentation of a written research proposal for doctoral research to the doctoral advisory committee, who will assess the proposal and offer the student pertinent counsel, advice and feedback. The approval of the research proposal by the advisory committee is the basic requirement for admission to doctoral candidacy; individual programs will normally impose additional requirements, such as the successful completion of oral and/or written comprehensive or qualifying examinations. These additional requirements may occur in conjunction with the presentation of the research proposal, or they may occur at different times within the course of doctoral study. Admission to doctoral candidacy is conferred with the approval of the dean of the Graduate College, on behalf of the Graduate Council, acting upon the recommendation of program faculty. It is the responsibility of the chair of the advisory committee to notify the Graduate College when admission to candidacy is granted by submitting the Admission to Doctoral Candidacy form.

22.11 Dissertation Hours Taken as a Doctoral Candidate.

Admission to candidacy must occur at least six months prior to the date of the final dissertation defense.

Since admission to candidacy may occur at various times related to the academic calendar, the student will need to be admitted to candidacy early in fall semester to be eligible to schedule their final dissertation defense and graduate in the spring; very early in the spring semester for summer graduation; and extremely early in the summer session for fall graduation. See the Graduate College Calendar for term-specific dates.

22.12 Dissertation.

A dissertation (doctoral thesis) is required of each doctoral candidate. The subject of the dissertation must be approved by the advisory committee and the dissertation is prepared under the direction of members of the committee or a special dissertation committee approved by the advisory committee chair.

The dissertation must follow specifications in the Graduate College Thesis/ Dissertation Guidelines, available at <http://gradcollege.okstate.edu> (<https://gradcollege.okstate.edu/resources/student-resources.html>). The style of the document is to be determined by the advisory committee and should be reflective of publications in the student's discipline. Any graduate student is writing a dissertation must attend a format and graduation review prior to submission of their final copy. The dates for the reviews are on the Graduate Calendar and a webinar version is also available.

All dissertation copies must have the necessary approval signatures before submission to the Graduate College.

It is strongly recommended that a graduate student submit complete copies of his or her dissertation to the advisory committee members at least two weeks prior to the defense date, that the defense presentation be publicized, and that the dissertation defense occur on a date during the normal academic semesters and sessions. Graduate programs may have additional or more restrictive requirements for dissertation defenses.

The student should submit an electronic copy of the dissertation through the OSU electronic submission website. Instructions for on-line

submission are given to the student after completion of the National Survey of Earned Doctorates. In addition, the student must submit to the Graduate College one paper copy of the approval page with all original signatures and the student's name and CWID number entered at the top of the page. Both the electronic submission and paper approval page must be received no later than the stated final copy submission deadline date (see the Graduate Calendar for dates).

22.13 Final Examination.

The student should arrange with the graduate program for the final examination and to distribute a copy of the dissertation as described in the preceding section. The final examination is primarily a defense of the dissertation. If the defense is judged inadequate, a decision on whether to permit re-examination will be made by the advisory committee. Another examination cannot be given for at least two months after a failure, and a graduate program may limit the number of times that the examination may be repeated. If the advisory committee decides against re-examination, the committee's decision is final. The outcome of the dissertation defense falls under the "professional and scholarly assessment made by faculty and advisory committees" and is not appealable.

The committee will notify the Graduate College immediately of results of the final examination. Following satisfactory completion of the final examination, the candidate will make changes in the dissertation as required by the committee and by the Graduate College and submit it in final form signed by the committee to the Graduate College by the semester deadline.

Please see the Graduate College's Best Practices: Advisory Committees and Defenses document for additional guidance.

Academic Calendar Graduate College Academic Calendar

Refer also to the University Academic Calendar (p. 89).

2021-2022

	Fall	Spring	Summer
Class work begins	Aug 16	Jan 10	May 17
Admission to doctoral candidacy for summer graduates due in Graduate College		January 28	
Admission to doctoral candidacy for fall graduates due in Graduate College			Jun 3
Thesis/ Dissertation Graduation Review: Attend in person review or watch the on-line tutorial	Oct 15	Mar 4	Jun 3

Last day to file a Graduation Clearance Form and a revised plan of study (if needed) and to Graduate College	Oct 22	Mar 18	Jun 17
Last day to file a Graduation Application* (formerly diploma application)	Nov 1	Apr 1	Jul 1
Admission to doctoral candidacy for spring graduates due in Graduate College	Nov 5		
Priority deadline to submit results of thesis/ dissertation oral defense form to Graduate College	Nov 12	Apr 8	Jul 8
Last day to submit results of thesis/ dissertation defense forms to Graduate College to meet semester graduation deadlines	Nov 19	Apr 15	Jul 15
Priority deadline for online submission of electronic dissertation or thesis, and paper submission of signature approval page	Nov 24	Apr 15	Jul 15
Last day to complete online submission of electronic dissertation or thesis, and paper submission of signature approval page	Dec 3	Apr 22	Jul 22
Term ends; Formal Reports, Creative Components due	Dec 10	May 6	Jul 29
Graduate Commencement	Dec 10	May 6	

* Last day to file for your name to appear in Fall and Spring/Summer Commencement Book. Summer deadline is for graduation clearance only.

Graduate Programs

Doctoral Degree Programs

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- Agricultural Education, PhD (p. 2804)
- Animal Science, PhD (p. 2805)
- Applied Educational Studies: Aviation and Space Education, EdD (p. 2806)
- Biochemistry and Molecular Biology, PhD (p. 2807)
- Biomedical Sciences, PhD (p. 2808)
- Biosystems Engineering, PhD (p. 2810)
- Business Administration: Accounting, PhD (p. 2811)
- Business Administration: Entrepreneurship, PhD (p. 2812)
- Business Administration: Executive Research, PhD (p. 2813)
- Business Administration: Finance, PhD (p. 2814)
- Business Administration: Hospitality and Tourism Management, PhD (p. 2815)
- Business Administration: Management Science and Information Systems, PhD (p. 2816)
- Business Administration: Management, PhD (p. 2817)
- Business Administration: Marketing, PhD (p. 2818)
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- Curriculum Studies: Curriculum and Leadership, PhD (p. 2826)
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- Education: Special Education, PhD (p. 2837)
- Education: Workforce and Adult Education, PhD (p. 2838)
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- Educational Leadership and Policy Studies: Higher Education, PhD (p. 2840)
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- Electrical Engineering, PhD (p. 2843)
- English, PhD (p. 2844)
- Entomology, PhD (p. 2845)
- Environmental Science, PhD (p. 2846)
- Fire and Emergency Management Administration, PhD (p. 2847)
- Food Science, PhD (p. 2848)
- Forensic Sciences, PhD (p. 2849)
- Geography, PhD (p. 2851)
- Geology, PhD (p. 2852)
- Health, Leisure and Human Performance: Health and Human Performance, PhD (p. 2853)
- Health, Leisure and Human Performance: Leisure Studies, PhD (p. 2854)
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- Human Development and Family Science, PhD (p. 2857)
- Human Sciences: Human Development and Family Science, PhD (p. 2858)
- Industrial Engineering and Management, PhD (p. 2859)
- Integrative Biology, PhD (p. 2860)
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- Mathematics, PhD (p. 2863)
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- Mechanical and Aerospace Engineering: Unmanned Aerial Systems, PhD (p. 2865)
- Microbiology, Cell and Molecular Biology, PhD (p. 2866)
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- Bioinformatics, GCRT (p. 2891)
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- Accounting: Data Analytics & Systems, MS (p. 2948)
- Accounting: Financial Reporting & Auditing, MS (p. 2949)
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- Aviation and Space, MS (p. 2958)
- Biochemistry and Molecular Biology, MS (p. 2959)
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- Business Administration: Entrepreneurship, MBA (p. 2971)
- Business Administration: Finance Investment Banking, MBA (p. 2972)
- Business Administration: Global Marketing, MBA (p. 2973)
- Business Administration: Hospitality and Tourism Management, MBA (p. 2974)
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- Business Administration: Marketing Analytics, MBA (p. 2977)
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- Business Analytics and Data Science: Advanced Data Science, MS (p. 2980)
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- Mechanical and Aerospace Engineering: Unmanned Aerial Systems, MS (p. 3080)
- Microbiology, Cell and Molecular Biology, MS (p. 3081)
- Music: Applied Music, MM (p. 3082)
- Music: Conducting, MM (p. 3083)
- Natural Resource Ecology and Management, MS (p. 3084)
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- Natural Resource Ecology and Management: Wildlife Ecology and Management, MS (p. 3088)
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- Plant and Soil Sciences, MS (p. 3099)
- Plant Biology, MS (p. 3100)
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- Quantitative Finance, MS (p. 3104)
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- Statistics, MS (p. 3108)
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- Teaching, Learning and Leadership: Special Education, MS (p. 3115)
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- Biosystems Engineering, MS (p. 2963)
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- Business Administration: Data Science, MBA (p. 2968)
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- Business Administration: Energy Business, MBA (p. 2970)
- Business Administration: Entrepreneurship, MBA (p. 2971)
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- Business Administration: Global Marketing, MBA (p. 2973)
- Business Administration: Hospitality and Tourism Management, MBA (p. 2974)
- Business Administration: Hospitality and Tourism Management, PhD (p. 2815)
- Business Administration: Human Resource Management, MBA (p. 2975)
- Business Administration: Information Assurance, MBA (p. 2976)
- Business Administration: Management, PhD (p. 2817)
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- Business Analytics and Data Science: Marketing Analytics, MS (p. 2983)
- Business Analytics and Data Science, GCRT (p. 2894)
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- Chemical Engineering, MS (p. 2984)
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- Accounting: Financial Reporting and Auditing, MS (p. 2949)
- Aging Studies, MS (p. 2950)
- Agricultural Communications, MS (p. 2951)
- Agricultural Economics, MS (p. 2952)
- Agricultural Economics, PhD (p. 2803)
- Agricultural Education and Leadership, MS (p. 2953)
- Agricultural Education, PhD (p. 2804)
- Animal Science, MS (p. 2954)
- Animal Science, PhD (p. 2805)
- Applied Educational Studies: Aviation and Space Education, EdD (p. 2806)
- Applied Statistics, MS (p. 2955)
- Art History, MA (p. 2956)
- Athletic Training, MAT (p. 2957)
- Aviation/Aerospace Administration, GCRT (p. 2889)
- Aviation and Space, MS (p. 2958)
- Big Data Analytics, GCRT (p. 2890)
- Biochemistry and Molecular Biology, MS (p. 2959)
- Biochemistry and Molecular Biology, PhD (p. 2807)

- Comparative and International Education, GCRT (p. 2898)
- Comparative Biomedical Science, MS (p. 3135)
- Comparative Biomedical Science, PhD (p. 3136)
- Computer Science, MS (p. 2988)
- Computer Science, PhD (p. 2822)
- Counseling: Mental Health Counseling, MS (p. 2989)
- Counseling: School Counseling, MS (p. 2991)
- Counseling Psychology, PhD (p. 2823)
- Crop Science, PhD (p. 2824)
- Curriculum Studies: College Curriculum and Teaching, PhD (p. 2825)
- Curriculum Studies: Curriculum and Leadership, PhD (p. 2826)
- Curriculum Studies: International and Peace Curriculum, PhD (p. 2827)
- Design, Housing and Merchandising: Apparel Design and Production, MS (p. 2993)
- Design, Housing and Merchandising: Interior Design, MS (p. 2994)
- Design, Housing and Merchandising: Merchandising, MS (p. 2995)
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- Dietetics, GCRT (p. 2900)
- Dietetics, MS (p. 2996)
- District Level Leadership, GCRT (p. 2901)
- Economics, MS (p. 2997)
- Economics, PhD (p. 2828)
- Education: Educational Administration, EdS (p. 2829)
- Education: Language, Literacy and Culture, PhD (p. 2830)
- Education: Learning, Design and Technology, PhD (p. 2831)
- Education: Mathematics Education, PhD (p. 2832)
- Education: School Psychology, EdS (p. 2833)
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- Education: Special Education, PhD (p. 2837)
- Education: Workforce and Adult Education, PhD (p. 2838)
- Educational and Psychological Measurement, GCRT (p. 2902)
- Educational Leadership and Policy Studies: Educational Administration, PhD (p. 2839)
- Educational Leadership and Policy Studies: Higher Education, PhD (p. 2840)
- Educational Leadership Studies: College Student Development, MS (p. 2998)
- Educational Leadership Studies: Higher Education, MS (p. 2999)
- Educational Leadership Studies: School Administration, MS (p. 3000)
- Educational Psychology, MS (p. 3001)
- Educational Psychology: Educational Psychology, MS (p. 3002)
- Educational Psychology: Educational Psychology, PhD (p. 2841)
- Educational Psychology: Research, Evaluation Measurement and Statistics, MS (p. 3003)
- Educational Psychology: Research, Evaluation Measurement and Statistics, PhD (p. 2842)
- Educational Psychology: School Psychometrics, MS (p. 3004)
- Educational Technology: Educational Technology, MS (p. 3005)
- Educational Technology: School Library Media, MS (p. 3006)
- Effective Teaching in Elementary Schools, GCRT (p. 2903)
- Effective Teaching in Secondary Schools, GCRT (p. 2904)
- Electrical Engineering, MEN (p. 3007)
- Electrical Engineering, MS (p. 3008)
- Electrical Engineering, PhD (p. 2843)
- Elementary Mathematics Specialist, GCRT (p. 2905)
- Engineering and Technology Management, GCRT (p. 2906)
- Engineering and Technology Management, MS (p. 3009)
- Engineering Technology: Fire Safety and Explosion Protection, MS (p. 3010)
- Engineering Technology: Mechatronics and Robotics, MS (p. 3012)
- English, MA (p. 3014)
- English, PhD (p. 2844)
- English: Creative Writing, MFA (p. 3015)
- English: Professional Writing, MA (p. 3016)
- English: Teaching English to Speakers of Other Languages, MA (p. 3018)
- Entomology, PhD (p. 2845)
- Entomology and Plant Pathology: Entomology, MS (p. 3019)
- Entomology and Plant Pathology: Plant Pathology, MS (p. 3020)
- Entrepreneurship, GCRT (p. 2907)
- Entrepreneurship, MS (p. 3021)
- Environmental Science, MS (p. 3022)
- Environmental Science, PhD (p. 2846)
- Environmental Science with Regulatory Certifications, GCRT (p. 2908)
- Environmental Science: Environmental Management Professional Science Masters, MS (p. 3023)
- Family and Community Services, MS (p. 3024)
- Family and Consumer Sciences Education, MS (p. 3025)
- Family Financial Planning, GCRT (p. 2909)
- Family Financial Planning, MS (p. 3026)
- Finance and Investment Banking, GCRT (p. 2910)
- Fire and Emergency Management Administration, MS (p. 3027)
- Fire and Emergency Management Administration, PhD (p. 2847)
- Food Science, MS (p. 3029)
- Food Science, PhD (p. 2848)
- Forensic Arson, Explosives, Firearms, and Toolmarks Investigation, GCRT (p. 2911)
- Forensic Investigative Sciences, GCRT (p. 2912)
- Forensic Psychology, GCRT (p. 2913)
- Forensic Sciences, MS (p. 3030)
- Forensic Sciences, PhD (p. 2849)
- Forensic Sciences: Arson, Explosives, Firearms and Toolmarks Investigation, MS (p. 3032)
- Forensic Sciences: Forensic Document Examination, MS (p. 3033)
- Forensic Sciences: Forensic Science Administration, MS (p. 3034)
- General Agriculture: Agribusiness, MAG (p. 3035)
- General Agriculture: Agriculture Leadership, MAG (p. 3036)
- Geography, MS (p. 3037)
- Geography, PhD (p. 2851)
- Geology, MS (p. 3038)
- Geology, PhD (p. 2852)
- Global Health, MS (p. 3040)
- Global Issues, GCRT (p. 2914)

- Global Studies, MS (p. 3041)
- Graphic Design, MFA (p. 3042)
- Grassland Management, GCRT (p. 2915)
- Health Analytics, GCRT (p. 2916)
- Health and Human Performance: Applied Exercise Science, MS (p. 3043)
- Health and Human Performance: Health Promotion, MS (p. 3044)
- Health and Human Performance: Physical Education, MS (p. 3045)
- Health Care Administration, GCRT (p. 2917)
- Health Care Administration: Finance, GCRT (p. 2918)
- Health Care Administration: Global Health, GCRT (p. 2919)
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- Health, Leisure and Human Performance: Health and Human Performance, PhD (p. 2853)
- Health, Leisure and Human Performance: Leisure Studies, PhD (p. 2854)
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- History, MA (p. 3047)
- History, PhD (p. 2856)
- Horticulture, MS (p. 3048)
- Hospitality and Tourism Management, MS (p. 3049)
- Human Development and Family Science, PhD (p. 2857)
- Human Development and Family Science: Applied Human Services, MS (p. 3051)
- Human Development and Family Science: Developmental and Family Sciences, MS (p. 3052)
- Human Development and Family Science: Early Childhood Education, MS (p. 3053)
- Human Development and Family Science: Family and Community Services, MS (p. 3054)
- Human Development and Family Science: Gerontology (Internet-Based Program), MS (p. 3055)
- Human Development and Family Science: Gerontology (On Campus), MS (p. 3056)
- Human Development and Family Science: Marriage and Family Therapy, MS (p. 3057)
- Human Resource Management, GCRT (p. 2921)
- Human Sciences: Human Development and Family Science, PhD (p. 2858)
- Industrial Engineering and Management, MS (p. 3059)
- Industrial Engineering and Management: Operations Research and Analytics, MS (p. 3060)
- Industrial Engineering and Management: Supply Chain and Logistics, MS (p. 3061)
- Industrial Engineering and Management, PhD (p. 2859)
- Infant Mental Health, GCRT (p. 2922)
- Information Assurance, GCRT (p. 2923)
- Integrative Biology, MS (p. 3062)
- Integrative Biology, PhD (p. 2860)
- Integrative Design Building Envelope, GCRT (p. 2924)
- Interdisciplinary Studies, MS (p. 3063)
- Interdisciplinary Toxicology, GCRT (p. 2925)
- International Agriculture, MAG (p. 3064)
- International Agriculture, MS (p. 3065)
- International Disaster and Emergency Management, GCRT (p. 2926)
- K-12 STEM Educator, GCRT (p. 2927)
- Leisure Studies, MS (p. 3067)
- Management Information Systems, MS (p. 3068)
- Management Information Systems: Big Data Analytics, MS (p. 3069)
- Management Information Systems: Cybersecurity, MS (p. 3070)
- Management Information Systems: Health Analytics, MS (p. 3071)
- Marketing Analytics, GCRT (p. 2928)
- Mass Communications, MS (p. 3072)
- Materials Science and Engineering, MS (p. 3074)
- Materials Science and Engineering, PhD (p. 2861)
- Mathematics, MS (p. 3076)
- Mathematics, PhD (p. 2863)
- Mechanical and Aerospace Engineering, MEN (p. 3078)
- Mechanical and Aerospace Engineering, MS (p. 3079)
- Mechanical and Aerospace Engineering: Unmanned Aerial Systems, MS (p. 3080)
- Mechanical and Aerospace Engineering, PhD (p. 2864)
- Mechanical and Aerospace Engineering: Unmanned Aerial Systems, PhD (p. 2865)
- Medical Sciences, GCRT (p. 2929)
- Microbiology, Cell and Molecular Biology, MS (p. 3081)
- Microbiology, Cell and Molecular Biology, PhD (p. 2866)
- Museum and Curatorial Studies, GCRT (p. 2930)
- Music: Applied Music, MM (p. 3082)
- Music: Conducting, MM (p. 3083)
- Natural Resource Ecology and Management, MS (p. 3084)
- Natural Resource Ecology and Management: Fisheries and Aquatic Ecology, MS (p. 3085)
- Natural Resource Ecology and Management: Forest Resources, MS (p. 3086)
- Natural Resource Ecology and Management: Rangeland Ecology and Management, MS (p. 3087)
- Natural Resource Ecology and Management: Wildlife Ecology and Management, MS (p. 3088)
- Natural Resource Ecology and Management, PhD (p. 2867)
- Natural Resource Ecology and Management: Fisheries and Aquatic Ecology, PhD (p. 2868)
- Natural Resource Ecology and Management: Forest Resources, PhD (p. 2869)
- Natural Resource Ecology and Management: Rangeland Ecology and Management, PhD (p. 2870)
- Natural Resource Ecology and Management: Wildlife Ecology and Management, PhD (p. 2871)
- Neuroscience, GCRT (p. 2931)
- Non-Profit Management, GCRT (p. 2932)
- Nutritional Sciences, PhD (p. 2872)
- Nutritional Sciences: Dietetics (Internet-Based Program), MS (p. 3089)
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- Nutritional Sciences: Nutrition, MS (p. 3092)
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- Philosophy, MA (p. 3095)
- Photonics, PhD (p. 2875)
- Physician Assistant Studies, MS (p. 3096)
- Physics, MS (p. 3097)
- Physics: Optics and Photonics, MS (p. 3098)
- Physics, PhD (p. 2877)
- Plant and Soil Sciences, MS (p. 3099)
- Plant Biology, MS (p. 3100)
- Plant Biology, PhD (p. 2878)
- Plant Pathology, PhD (p. 2879)
- Political Science, MA (p. 3101)
- Program Evaluation, GCRT (p. 2934)
- Psychology: Clinical, PhD (p. 2880)
- Psychology: Experimental Psychology, PhD (p. 2881)
- Public Health in Rural and Underserved Communities, GCRT (p. 2935)
- Public Health: Rural and Underserved Populations, MPH (p. 3102)
- Quantitative Finance, MS (p. 3104)
- Recreation and Leisure Management, GCRT (p. 2936)
- School Administration, EdD (p. 2882)
- School Library Certification, GCRT (p. 2937)
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- Social Foundations of Education, MA (p. 3105)
- Sociology, MS (p. 3106)
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- Soil Science, PhD (p. 2886)
- Special Education, GCRT (p. 2938)
- Sport Communication, GCRT (p. 2939)
- Statistical Methods and Analyses in Educational and Behavioral Sciences, GCRT (p. 2940)
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- Teaching: Elementary, MATT (p. 3117)
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- Teaching, Learning and Leadership: Gifted and Talented Education, MS (p. 3110)
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- Teaching, Learning and Leadership: Mathematics/Science Education, MS (p. 3113)
- Teaching, Learning and Leadership: Reading and Literacy, MS (p. 3114)
- Teaching, Learning and Leadership: Special Education, MS (p. 3115)
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Faculty

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- Animal Science, PhD (p. 2805)
- Applied Educational Studies: Aviation and Space Education, EdD (p. 2806)
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- Biomedical Sciences, PhD (p. 2808)
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- Health, Leisure and Human Performance: Leisure Studies, PhD (p. 2854)
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- Integrative Biology, PhD (p. 2860)
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- Natural Resource Ecology and Management: Fisheries and Aquatic Ecology, PhD (p. 2868)
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Agricultural Economics, PhD

Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 60

Code	Title	Hours
Core Courses		
ECON 6023	Microeconomic Theory II	3
ECON 6043	Macroeconomic Theory II	3
AGEC 6213	Advanced Econometrics	3
STAT 5253	Mathematical Statistics I	3
STAT 5263	Mathematical Statistics II	3
AGEC 6403	Advanced Production Economics	3
AGEC 6303	Advanced Agricultural Marketing ¹	3
AGEC 5703	American Agricultural Policy	3
AGEC 6102	Teaching Practicum in Agricultural Economics	2
Hours Subtotal		26
Electives		
Select at least 10 hours of electives: ²		10
AGEC 5203	Advanced Agricultural Prices	
AGEC 5233	Primary Data Analysis in Economic Research	
AGEC 5311	Agricultural Marketing: Concepts and Tools	
AGEC 5321	Agricultural Marketing and Economic Development	
AGEC 5331	Agricultural Marketing: Advanced Concepts	
AGEC 5403	Production Economics	
AGEC 5503	Economics of Natural and Environmental Resource Policy	
AGEC 5603	Advanced Agricultural Finance	
AGEC 5723	Plan & Pol Devlpmnt	
AGEC 6103	Advanced Applications of Mathematical Programming	
ECON 6623	Economic Development I	
ECON 6643	Economic Development II	
Hours Subtotal		10
Thesis		
Total thesis hours based on advice of student's advisory committee. ²		24
Hours Subtotal		24
Total Hours		60

¹ Prerequisites of AGEC 5203 or AGEC 5311, 5321, and 5331.

² Total number of hours for thesis must be approved by student's advisory committee and will need to reach a total of 34 hours combined with electives.

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General

Agricultural Education, PhD

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 60 (Beyond the Master's Degree)

Code	Title	Hours
Required Courses		
AGED 5823	Advanced Methods of Teaching Agriculture	3
AGED 6103	History and Philosophical Foundations of Agricultural and Extension Education	3
AGLE 5303	Foundations of Leadership Theory	3
AECL 5863	Methods of Technological Change	3
AECL 6223	Program Evaluation in Agriculture and Extension	3
Hours Subtotal		15
Statistics and Research Courses		
AECL 5983	Social Sciences Research in Agricultural Sciences and Natural Resources	3
Select 12 hours from the following (must include one qualitative research course):		12
REMS 5953	Statistical Methods in Education (or equivalent)	
STAT 5013	Statistics for Experimenters I	
REMS 6003	Analyses of Variance (or equivalent)	
STAT 5023	Statistics for Experimenters II	
REMS 6013	Multiple Regression Analysis in Behavioral Studies (or equivalent)	
Specialty Area Courses		
Select 15 hours from the following:		15
AECL 5101	Orientation to Graduate Programs in Agricultural Education, Communications and Leadership	
AECL 5993	Social Sciences Data Analysis and Interpretation in Agricultural Sciences and Natural Resources	
AECL 6063	Research Applications with Q Methodology	
AGCM 5100	Special Topics in Agricultural Communications	
AGCM 5103	History and Philosophical Foundations of Agricultural Communications	
AGCM 5203	Theory and Practice in Agricultural Communications	
AGCM 5213	Advanced Concepts in Agricultural Publishing	
AGCM 5303	Communicating Ethical Issues in Agriculture	
AGCM 5990	Advanced Studies in Agricultural Communications	
AGED 5123	Adult Programs in Agricultural and Extension Education	
AGED 5203	Grant Seeking	
AGED 5500	Directing Programs of Supervised Experience	

AGED 5990	Problems in Agricultural and Extension Education	
AGED 6983	Qualitative Research Methods in Agricultural Education	
AGLE 5353	Leadership in Agriculture	
AGLE 6203	Extension Program Development	
Other courses could include:		
AGED 5623	Volunteer Management in Agricultural and Extension Education	
AGED 5703	Cultural Competency for Working in Agricultural and Extension Education	
AGED 5813	College Teaching of Agriculture and Natural Resources	
Other approved AECL, AGCM, AGED, AGLE courses.		
Hours Subtotal		30
Dissertation Hours		
AECL 6000	Doctoral Dissertation in Agricultural Education, Communications and Leadership	15
Hours Subtotal		15
Total Hours		60

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Animal Science, PhD

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 60 (Beyond the Master's Degree)

Code	Title	Hours
Required Courses ¹		
Select at least 15 hours from below with approval of the advisory committee and area of specialization:		15
ANSI 5102	Ethics and Professionalism in Animal and Food Science	
ANSI 5010	Special Problems	
ANSI 5113	Basic Reproductive Physiology	
ANSI 5123	Functional and Molecular Endocrinology	
ANSI 5213	Advances in Meat Science	
ANSI 5303	Advanced Animal Breeding	
ANSI 5313	Marker Assisted Selection in Livestock	
ANSI 5333	Carcass Value Estimation Systems	
ANSI 5553	Interpreting Animal and Food Science Research	
ANSI 5573	Techniques in Animal Molecular Biology	
ANSI 5613	Advanced Beef Production	
ANSI 5733	Advanced Ruminant Nutrition	
ANSI 5743	Rumenology	
ANSI 5753	Animal Nutrition Techniques and Laboratory Methods	
ANSI 5763	Advanced Nonruminant Nutrition	
ANSI 5773	Protein Nutrition	
ANSI 5783	Vitamin and Mineral Nutrition	
Food Science (FDSC) 5000- and 6000-level courses		
Hours Subtotal		15
Electives ¹		
Select 15 hours of other graduate courses with the approval of the advisory committee and area of specialization.		15
Choose from graduate level classes in STAT, BIOC, MICR, BIOL, ZOOL, NSCI, BVSC, or other courses deemed appropriate by advisory committee.		
Hours Subtotal		15
Other Requirements ¹		
ANSI 6000	Doctoral Research and Dissertation (Offered for variable credit, 1-10 credit hours, maximum of 30 credit hours.)	
or FDSC 6000	Doctoral Research and Dissertation	
ANSI 6110	Seminar (Offered for variable credit, 1-6 credit hours, maximum of 6 credit hours.)	
Hours Subtotal		30
Total Hours		60

¹ Combined Required Courses, Electives and Other Requirements hours must total 60 hours.

Animal Science Requirements

- At least 75 percent of total credit hours must be 5000/6000 level courses.

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Applied Educational Studies: Aviation and Space Education, EdD

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 61

Code	Title	Hours
Required Courses		
AVED 5553	Aerospace Proposal and Procurement	3
AVED 5573	Aerospace Defense Acquisition	3
AVED 5593	Influencing Public Policy in the Aerospace Industry	3
AVED 6000	Doctoral Thesis	10
AVED 6103	Doctoral Seminar in Aerospace Education	3
AVED 6303	The Application of Qualitative Methods in Aviation Research	3
AVED 6313	Administration of Aviation Institutions	3
AVED 6413	Development of Air and Space Flight	3
AVED 6553	Foundations of Airline Executive Leadership	3
AVED 6613	Aviation Executive Development	3
AVED 6773	Applied Aviation and Space Research	3
Hours Subtotal		40
Electives		
Select 21 hours of the following:		21
AVED 5453	Advanced Aviation Security	
AVED 5563	Aerospace Leadership and Management	
AVED 5773	Historical Significance of Aviation	
AVED 5823	Space Science	
AVED 5883	Aviation Economics	
AVED 5893	Aerospace Executive Decision Making	
AVED 5963	Airport Operations	
AVED 5973	Aerospace Law	
AVED 5993	Ethics in Aviation	
REMS 5013	Research Design and Methodology	
REMS 5953	Statistical Methods in Education	
SCFD 6113	Theoretical Foundations of Inquiry	
Hours Subtotal		21
Total Hours		61

Graduate College Doctor of Education (EdD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Education (EdD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Biochemistry and Molecular Biology, PhD

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 90 (Beyond the Bachelor's Degree)

Code	Title	Hours
Required Core Courses		
BIOC 5002	Research Compliance and Biochemistry Graduate Colloquium	2
BIOC 5112	Articulation of Research Logic	2
BIOC 5120	Biochemistry and Molecular Biology Graduate Research Colloquium	1
BIOC 5753	Biochemical Principles	3
BIOC 5753	Biochemical Principles	3
BIOC 5853	Metabolism	3
BIOC 5930	Advanced Biochemical Techniques	3
BIOC 6110	Seminar ²	2
BIOC 6740	Physical Biochemistry	3
Plus 4 advanced (6000-level BIOC courses)		12
BIOC 6723	Signal Transduction	
BIOC 6733	Functional Genomics	
BIOC 6740	Physical Biochemistry	
BIOC 6753	Epigenetics	
BIOC 6763	Nucleic Acids and Protein Synthesis	
BIOC 6773	Protein Structure and Enzyme Function	
BIOC 6783	Biomembranes and Bioenergetics	
BIOC 6793	Plant Biochemistry	
Hours Subtotal		34

Electives

Select 41 hours of the following:		41
BIOC 4723	Introduction to Bioinformatics	
BIOC 5102	Molecular Genetics	
BIOC 5824	Biochemical Laboratory Methods	
BIOC 6820	Selected Topics in Biochemistry (15 Hours Maximum)	
Hours Subtotal		41

Required Research

BIOC 6000	Research	15
Hours Subtotal		15
Total Hours		90

¹ Course to be taken 1 time each year prior to year of graduation.

² Course to be taken 2 times at one credit each.

Total Hours: 60 (Beyond the Master's Degree)

Code	Title	Hours
Required Core Courses		
Combined 45 hours of required core courses and electives to total 45 hours.		45

BIOC 5002	Research Compliance and Biochemistry Graduate Colloquium
BIOC 5112	Articulation of Research Logic
BIOC 5120	Biochemistry and Molecular Biology Graduate Research Colloquium (1 hour)
<i>Other Core Courses Listed Below as Required by the Student's Advisor and Graduate Thesis Advisory Committee:</i>	
BIOC 5723	Introduction to Bioinformatics
BIOC 5753	Biochemical Principles
BIOC 5853	Metabolism
BIOC 5930	Advanced Biochemical Techniques (10 credits maximum)
BIOC 6110	Seminar
BIOC 6723	Signal Transduction
BIOC 6733	Functional Genomics
BIOC 6740	Physical Biochemistry
BIOC 6753	Epigenetics
BIOC 6773	Protein Structure and Enzyme Function
BIOC 6783	Biomembranes and Bioenergetics
BIOC 6793	Plant Biochemistry

Electives

Select 15 hours minimum from the following:

BIOC 4723	Introduction to Bioinformatics
BIOC 5102	Molecular Genetics
BIOC 5824	Biochemical Laboratory Methods
BIOC 6820	Selected Topics in Biochemistry

Hours Subtotal 45

Required Research

BIOC 6000	Research	15
Hours Subtotal		15

Total Hours 60

¹ Course to be taken 1 time each year prior to year of graduation.

Other Biochemistry and Molecular Biology, PhD, Requirements

- Pass PhD Preliminary Examination.
- Pass PhD Candidacy Examination: Present and pass the defense of a written research proposal.
- The student's Graduate Committee must approve the written thesis, and an oral defense on the content of the thesis must be passed.

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Biomedical Sciences, PhD

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 60

Code	Title	Hours
Degree Core		
<i>Required Courses</i>		
BIOM 6000	Research and Dissertation	30
BIOM 6662	Research Ethics and Survival Skills for the Biomedical Sciences	2
BIOM 6922	Scientific Communication in Biomedical Sciences	2
Hours Subtotal		34
Optional Electives		
Select 26 hours from the following:		26
BIOM 5010	Special Topics in Biomedical Sciences	
BIOM 5020	Biomedical Sciences Seminar	
BIOM 5116	Clinical Anatomy	
BIOM 5122	Introduction and Survey of Human Structure	
BIOM 5133	Neuroanatomy	
BIOM 5144	Histology and Development	
BIOM 5215	Medical Biochemistry	
BIOM 5316	Medical Microbiology and Immunology	
BIOM 5616	Graduate Biomedical Physiology	
BIOM 5621	Introduction to Translational Research	
BIOM 5631	Disease Research in Medicine	
BIOM 5641	Cornerstones of Vertebrate Paleontology	
BIOM 5653	Evolutionary Physiology	
BIOM 5663	Graduate Pharmacology	
BIOM 5672	Scientific Outreach Training for Graduate Students	
BIOM 5683	Chronic Inflammation and Cancer Development	
BIOM 5693	Principle Concepts of Cellular and Molecular Immunology	
BIOM 5703	Applied Multivariate and Evolutionary Analysis of Paleontological Data	
BIOM 5983	Principles of Neuroscience	
BIOM 5993	Principles of Neuroanatomy	
BIOM 6175	Molecular And Cellular Biology	
BIOM 6183	Cellular and Molecular Biology of Pain	
BIOM 6193	Paleommalogy	
BIOM 6214	Advanced Topics in Medical Biochemistry	
BIOM 6233	Enzyme Analysis	
BIOM 6243	Human Nutrition	
BIOM 6263	Techniques in Molecular Biology	
BIOM 6333	Immunology	
BIOM 6343	Microbial Physiology	
BIOM 6353	Molecular Virology	

BIOM 6363	Immunobiology of Infectious Disease
BIOM 6413	Graduate General Pathology and Laboratory Medicine
BIOM 6523	Cardiovascular Physiology and Pharmacology
BIOM 6543	Environmental Toxins in the Brain
BIOM 6583	Neuroinflammation
BIOM 6613	Environmental Physiology
BIOM 6643	Neurophysiology
BIOM 6653	Graduate Seminar In Signal Transduction
BIOM 6663	Neuroethology
BIOM 6673	Genomics
BIOM 6705	Advanced Gross Anatomy
BIOM 6723	Field Techniques in Vertebrate Paleontology
BIOM 6733	Human Microbiome in Health and Disease
BIOM 6743	Foundations in Medical Genetics, Molecular Biology and Development
BIOM 6752	Foundations in Medical Cell and Tissue Biology
BIOM 6762	Foundations in Medical Biochemistry
BIOM 6771	Foundations in Medical Pharmacology
BIOM 6781	Foundations in Medical Immunology
BIOM 6793	Foundations in Medical Microbiology
BIOM 6800	Critical Readings in Biomedical Sciences
BIOM 6810	Structure and Function of the Human Cardiovascular System
BIOM 6820	Structure and Function of the Human Gastrointestinal/Hepatic System
BIOM 6830	Biomedical Perspectives on Human Hematology
BIOM 6840	Structure and Function of the Human Musculoskeletal System
BIOM 6843	Vertebrate Osteology
BIOM 6850	Structure and Function of the Human Renal System
BIOM 6860	Structure and Function of the Human Reproductive Systems and Reproductive Biology
BIOM 6870	Structure and Function of the Human Respiratory System
BIOM 6880	Biomedical Perspectives on Psychiatry
BIOM 6810	Structure and Function of the Human Cardiovascular System
BIOM 6820	Structure and Function of the Human Gastrointestinal/Hepatic System
BIOM 6830	Biomedical Perspectives on Human Hematology
BIOM 6840	Structure and Function of the Human Musculoskeletal System
BIOM 6850	Structure and Function of the Human Renal System
BIOM 6860	Structure and Function of the Human Reproductive Systems and Reproductive Biology

BIOM 6870	Structure and Function of the Human Respiratory System	
BIOM 6880	Biomedical Perspectives on Psychiatry	
BIOM 6900	Structure and Function of the Human Endocrine System	
BIOM 6910	Structure and Function of the Human Nervous System	
BIOM 6933	Cornerstones of Graduate Biomedical Sciences	
BIOM 6943	Advanced Vertebrate Paleontology	
BIOM 6952	Paleohistology Techniques	
BIOM 6962	Evolutionary Biomechanics	
BIOM 6972	Role of Nicotinic Acetylcholine Receptors in Neuropsychiatric Disorders	
Hours Subtotal		26
Other Requirements		
Research Proposal		
Qualifying Exam		
Dissertation Defense		
Total Hours		60

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Biosystems Engineering, PhD

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 60

Code	Title	Hours
Required Courses		
BAE 5501	Seminar	1
BAE 6101	Teaching Practicum in Biosystems Engineering	1
Advanced Math (if advanced math was not completed in Master's program)		3
Hours Subtotal		5
Specialization and Dissertation		
Combination of Dissertation and Specialization to total 55 hours.		55
<i>Core Courses (By Specialty Area)</i>		
Machine Systems		
BAE 5413	Advanced Instrumentation and Control Systems for Biological Applications	
Environment and Natural Resources		
BAE 6313	Stochastic Methods in Hydrology ¹	
BAE 6333	Fluvial Hydraulics ²	
BAE 6343	Ground Water Contaminant Transport ³	
BAE 6520	Problems in Soil and Water Engineering ⁴	
Bioprocessing and Biotechnology		
BAE 5213	Renewable Energy Engineering	
BAE 5283	Advanced Bioprocess Engineering	
BAE 5413	Advanced Instrumentation and Control Systems for Biological Applications	
CHE 5123	Advanced Chemical Reaction Engineering	
CHE 5373	Process Simulation	
CHE 5743	Chemical Engineering Process Modeling	
STAT 5303	Experimental Designs	
<i>Research and Additional Requirements</i>		
BAE 6000	Doctoral Research and Dissertation	
Hours Subtotal		55
Total Hours		60

¹ Prerequisites: BAE 4313 or CIVEN 5843 and STAT 4053.

² Prerequisites: ENGSC 3233 or equivalent.

³ Prerequisites: AGRON 5583 or CIVEN 5913.

⁴ Prerequisites: CHEM 1515, BAE 4313 or equivalent.

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Business Administration: Accounting, PhD

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 60

Code	Title	Hours
Research Methods		
ECON 5213	Introduction to Econometrics	3
ECON 5223	Mathematical Economics I	3
ECON 6013	Microeconomic Theory I	3
STAT 5203	Large Sample Inference	3
STAT 5023	Statistics for Experimenters II	3
STAT 5063	Statistical Machine Learning with R	3
Hours Subtotal		18
Dissertation Hours		
ACCT 6000	Doctoral Research and Thesis	15
Hours Subtotal		15
Doctoral Seminars		
ACCT 6703	Seminar in Accounting Research	3
ACCT 6110	Graduate Readings and Special Topics in Accounting (Behavioral Research in Accounting)	3
ACCT 6110	Graduate Readings and Special Topics in Accounting (Analytical and Empirical Research)	3
ACCT 6110	Graduate Readings and Special Topics in Accounting (Capital Markets Research)	3
Hours Subtotal		12
Guided Electives		
Select 15 hours from one of the following tracks:		15
<i>For Archival Research Candidates</i>		
ACCT 6110	Graduate Readings and Special Topics in Accounting (Faculty-Guided Independent Study)	
AGEC 5213	Econometric Methods	
AGEC 6213	Advanced Econometrics	
ECON 6213	Econometrics I	
ECON 6243	Econometrics II	
FIN 5243	Financial Markets	
FIN 6053	Financial Theory and Corporate Policy	
FIN 6660	Seminar in Finance	
STAT 5053	Time Series Analysis	
<i>For Behavioral Research Candidates</i>		
ACCT 6110	Graduate Readings and Special Topics in Accounting	
MGMT 6353	Advanced Methods in Management Research	
REMS 6003	Analyses of Variance	
STAT 5033	Nonparametric Methods	
STAT 5043	Sample Survey Designs	

STAT 5303	Experimental Designs	
Hours Subtotal		15
Total Hours		60

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Business Administration: Entrepreneurship, PhD

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 60

Code	Title	Hours
Required Courses		
Statistics Sequence		
Select 42 hours, per Plan of Study		42
Dissertation		
Select 18 hours of Dissertation		18
Doctoral Seminars		
Requirements include department seminars in entrepreneurship and related disciplines, a minor area.		
Suggested courses:		
EEE 6343	Entrepreneurship Processes	
EEE 6200	Entrepreneurship Research Project	
EEE 6213	Entrepreneurship: Theory and History	
EEE 6263	Theoretical Foundations in Entrepreneurship	
EEE 6353	Advanced Research Methods in Entrepreneurship	
EEE 6363	Individual Theories in Entrepreneurship Research	
Guided Electives		
Hours in this section to be determined by plan of study.		
Total Hours		60

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Business Administration: Executive Research, PhD

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 60

Code	Title	Hours
Research Methods		
MGMT 6343	Contemporary Research in Management I	3
MGMT 6343	Contemporary Research in Management I (Contemporary Research in Management II)	3
MGMT 6353	Advanced Methods in Management Research	3
MSIS 6100	Business Analytics	3
MSIS 6343	Advanced Methods in MSIS Research	3
MKTG 6413	Advanced Marketing Research	3
BADM 6713	Theory Building and Scientific Research in Business	3
Hours Subtotal		21
Dissertation		
MGMT 6363	Advanced Organization Theory	3
BADM 6000	Research and Thesis (Research and Thesis I)	5
BADM 6000	Research and Thesis (Research and Thesis II)	5
BADM 6000	Research and Thesis (Research and Thesis III)	5
Hours Subtotal		18
Doctoral Seminars		
BADM 6513	Org Science I: Micro Issues in Business (Advanced Organizational Behavior)	3
BADM 6523	Org Science II: Macro Issues in Business (Advanced Strategic Management)	3
MKTG 6100	Advanced Seminar in Marketing (Theory Building)	3
BADM 6100	Seminar in Business Administration	3
BADM 6723	Dissertation Design	3
Hours Subtotal		15
Guided Electives		
Select 6 hours of additional courses required by the committee.		6
Hours Subtotal		6
Total Hours		60

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Business Administration: Finance, PhD

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 69

Code	Title	Hours
Research Methods		
STAT 5253	Mathematical Statistics I	3
STAT 5263	Mathematical Statistics II	3
Select 9 hours from the following:		9
ACCT 6110	Graduate Readings and Special Topics in Accounting	
ACCT 6703	Seminar in Accounting Research	
STAT 5033	Nonparametric Methods	
STAT 5043	Sample Survey Designs	
STAT 5053	Time Series Analysis	
STAT 5063	Statistical Machine Learning with R	
STAT 5073	Categorical Data Analysis	
STAT 5123	Probability Theory	
STAT 5133	Stochastic Processes	
STAT 5213	Bayesian Analysis	
STAT 5513	Multivariate Analysis	
ECON 6010	Seminar in Economic Policy	
ECON 6033	Macroeconomic Theory I	
AGEC 6213	Advanced Econometrics	
Hours Subtotal		15
Dissertation Hours		
Select 15 hours of Thesis		15
Hours Subtotal		15
Doctoral Seminars		
FIN 6053	Financial Theory and Corporate Policy	3
FIN 6660	Seminar in Finance	5
FIN 6660	Seminar in Finance	5
FIN 6660	Seminar in Finance	5
FIN 5763	Derivative Securities and the Management of Financial Price Risk	3
FIN 5773	Financial Engineering	3
Hours Subtotal		24
Guided Electives		
<i>Required: Economics</i>		
ECON 5033	Macroeconomic Analysis	3
ECON 6013	Microeconomic Theory I	3
ECON 6323	Mathematical Economics I	3
ECON 6213	Econometrics I	3
ECON 6243	Econometrics II	3
Hours Subtotal		15
Total Hours		69

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Business Administration: Hospitality and Tourism Management, PhD

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 60 (Beyond the Master's Degree)

Code	Title	Hours
Required Core Courses		
HTM 6111	Hospitality and Tourism Doctoral Studies and Research	1
HTM 6113	Hospitality and Tourism Education	3
HTM 6713	Contemporary Hospitality and Tourism Theory	3
HTM 6993	Advanced Hospitality and Tourism Research	3
Hours Subtotal		10
Electives (Specialization)		
Select 17 hours of approved 5000-level or above courses that fit your specialization/focus.		17
Hours Subtotal		17
Research Support Courses		
Select 18-30 hours.		18
Must Include:		
One Intermediate Statistics		
SOC 5243	Social Research Design	
SOC 5213	Techniques of Population Analysis	
STAT 5023	Statistics for Experimenters II	
STAT 5043	Sample Survey Designs	
STAT 5223	Statistical Inference	
STAT 5303	Experimental Designs	
STAT 5323	Theory of Linear Models I	
STAT 5333	Theory of Linear Models II	
STAT 5513	Multivariate Analysis	
REMS 5373	Educational Measurements	
REMS 6003	Analyses of Variance	
And One Advanced Statistics		
HDFS 6143	Structural Equation Modeling for HDFS Applications	
HDFS 6153	Multilevel Modeling for HDFS Applications	
MGMT 6553	Advanced Methods in Management Research III	
MSIS 6343	Advanced Methods in MSIS Research	
MKTG 6913	Measurement and Experimental Design	
REMS 6013	Multiple Regression Analysis in Behavioral Studies	
REMS 6033	Factor Analysis in Behavioral Research	
STAT 5073	Categorical Data Analysis	
STAT 5303	Experimental Designs	
STAT 5333	Theory of Linear Models II	
STAT 5513	Multivariate Analysis	
STAT 6113	Probability Theory	

STAT 6203	Large Sample Inference	
STAT 6223	Advanced Statistical Inference	
Hours Subtotal		18
Dissertation		
15 hours of dissertation		15
Strongly encouraged:		
Approved internship in research and/or instruction (maximum of 3 hours for each intern program).		
Foreign or computer language skills.		
Hours Subtotal		15
Total Hours		60

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Business Administration: Management Science and Information Systems, PhD

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 60

Code	Title	Hours
Methods Courses		
	Select 15 hours of approved courses.	15
Doctoral Seminar/Practicum Courses		
	Select 18 hours of approved courses (12 hours of which must be from MSIS).	18
Electives		
	Select 6 hours of approved courses.	6
Colloquia		
	Select 3 hours of Colloquia	3
Dissertation		
	Select 18 hours of dissertation.	18
Total Hours		60

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Business Administration: Management, PhD

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 60

Code	Title	Hours
Research Methods		
MGMT 6353	Advanced Methods in Management Research	3
REMS 6003	Analyses of Variance	3
REMS 6013	Multiple Regression Analysis in Behavioral Studies	3
REMS 6320	Doctoral Seminar in REMS	3
MGMT 6553	Advanced Methods in Management Research III	3
Hours Subtotal		15
Dissertation		
Select 18 hours of Dissertation		18
Hours Subtotal		18
Doctoral Seminars		
MGMT 6313	Advanced Organizational Behavior	3
MGMT 6323	Advanced Strategic Management	3
MGMT 6333	MESO Organization Studies	3
MGMT 6343	Contemporary Research in Management I	3
Hours Subtotal		12
Guided Electives		
Additional coursework will be chosen by the student, in conjunction with a faculty committee, to support the individual student's specific interests and/or needs. In cases where an incoming student does not have an undergraduate degree in Business or an MBA, it may be determined that s/he needs to take one or more leveling courses in the functional areas of business (e.g., Accounting, Finance, Marketing, etc.).		15
Hours Subtotal		15
Total Hours		60

Additional Business Administration, PhD, Requirements

- Minimum grade of "B" required on all degree courses

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Business Administration: Marketing, PhD

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 60 (Beyond the Master's Degree)

Code	Title	Hours
Research Methods		
MKTG 6413	Advanced Marketing Research	3
MKTG 6913	Measurement and Experimental Design	3
MKTG 6323	Seminar in Advanced Consumer Behavior	3
MKTG 6513	Seminar in Marketing Theory	3
MKTG 6683	Seminar in Marketing Strategy	3
Hours Subtotal		15
Electives		
27 hours of electives		27
<i>Required Electives</i>		
MKTG 6100	Advanced Seminar in Marketing	
BADM 6100	Seminar in Business Administration	
MSIS 6343	Advanced Methods in MSIS Research	
Additional electives chosen in consultation with advisor		
Dissertation		
Select 18 hours of dissertation		18
Hours Subtotal		45
Total Hours		60

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Chemical Engineering, PhD

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 60 (Beyond the Bachelor's Degree)

Code	Title	Hours
Core Courses		
CHE 5123	Advanced Chemical Reaction Engineering	3
CHE 5213	Advanced Transport Phenomena	3
CHE 5743	Chemical Engineering Process Modeling	3
CHE 5843	Principles of Chemical Engineering Thermodynamics	3
CHE 5302	Introduction to Science and Engineering Research	2
Hours Subtotal		14
Seminar		
CHE 6010	Chemical Engineering Seminar	7
Hours Subtotal		7
Electives		
Approved elective (CHE or other) courses, selected by the student, with approval of the student's advisory committee.		15
<i>Suggested Elective Courses</i>		
CHE 5073	Tissue Engineering	
CHE 5133	Catalysis and Photocatalysis	
CHE 5283	Advanced Bioprocess Engineering	
CHE 5293	Advanced Biomedical Engineering	
CHE 5323	Electrochemical Engineering	
CHE 5373	Process Simulation	
CHE 5493	Molecular Modeling and Simulation	
CHE 5523	Colloid Processing	
CHE 5603	Membrane Separations	
CHE 5753	Applied Numerical Computing for Scientists and Engineers	
CHE 5273	Basic Physiology and Physiological System Analysis for Engineers	
Hours Subtotal		15
Thesis		
CHE 6000	Doctoral Thesis ¹	24
Hours Subtotal		24
Total Hours		60

Total Hours: 30 (Beyond the Master's Degree from Oklahoma State University)

Code	Title	Hours
Seminar		
CHE 6010	Chemical Engineering Seminar	4
Hours Subtotal		4
Electives		
Graduate-approved elective (CHE or other) courses, selected by the student, with approval of the student's advisory committee.		9
Hours Subtotal		9

Thesis		
CHE 6000	Doctoral Thesis ¹	17
Hours Subtotal		17
Total Hours		30

¹ With approval of the student's advisory committee, additional elective courses may be taken, with a corresponding reduction in required credits in CHE 6000; but the number of CHE credits may be no less than 15.

Total Hours: 42 (Beyond the Master's Degree)²

Code	Title	Hours
Core Courses		
CHE 5123	Advanced Chemical Reaction Engineering	3
CHE 5213	Advanced Transport Phenomena	3
CHE 5743	Chemical Engineering Process Modeling	3
CHE 5843	Principles of Chemical Engineering Thermodynamics	3
CHE 5302	Introduction to Science and Engineering Research	2
Hours Subtotal		14
Seminar		
CHE 6010	Chemical Engineering Seminar	6
Hours Subtotal		6
Electives		
Graduate-approved elective (CHE or other) courses, selected by the student, with approval of the student's advisory committee.		6
Hours Subtotal		6
Thesis		
CHE 6000	Doctoral Thesis	16
Hours Subtotal		16
Total Hours		42

² With at least 18 transfer credit hours, transfer credits must have grades of "B" or better, be less than ten years old at the time of the student's graduation, and approved by the Graduate Program Advisory Committee.

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Chemistry, PhD

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 90

Code	Title	Hours
Core Courses		
CHEM 5001	Introduction to Chemistry Research	1
CHEM 5000	Thesis	6
CHEM 5011	Graduate Seminar	1
CHEM 6010	Research Seminar	7
CHEM 6011	Advanced Seminar	1
Hours Subtotal		16
Electives		
Select 20 hours from the following:		20
CHEM 5053	Foundations of Physical Chemistry	
CHEM 5063	Foundations of Organic Chemistry	
CHEM 5073	Foundations of Analytical Chemistry	
CHEM 5263	Foundations of Inorganic Chemistry	
CHEM 5103	Physical and Chemical Separations	
CHEM 5223	Polymer Chemistry	
CHEM 5373	Spectrometric Identification of Organic Compounds	
CHEM 5443	Mechanism and Structure in Organic Chemistry	
CHEM 5563	Chemical Thermodynamics I	
CHEM 5963	Advanced Inorganic Chemistry	
CHEM 6103	Electroanalytical Chemistry	
CHEM 6223	Physical Polymer Science	
CHEM 6420	Special Topics in Organic Chemistry	
CHEM 6650	Selected Topics in Chemistry	
Hours Subtotal		20
Dissertation		
CHEM 6000	Doctoral Dissertation Research	54
Hours Subtotal		54
Total Hours		90

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Civil Engineering, PhD

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 60 (Beyond the Master's Degree)

Code	Title	Hours
Coursework		
Select 30 credit hours of approved 5000-level coursework.		30
Hours Subtotal		30
Thesis		
CIVE 6000	PhD Research Dissertation	30
Hours Subtotal		30
Total Hours		60

Total Hours: 90 (Beyond the Bachelor's Degree)

Code	Title	Hours
Coursework		
Select 60 hours of approved 5000-level coursework.		60
Hours Subtotal		60
Thesis		
CIVE 6000	PhD Research Dissertation	30
Hours Subtotal		30
Total Hours		90

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Computer Science, PhD

Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 60

Code	Title	Hours
Core Requirements ^{1,2}		
CS 5113	Computer Organization and Architecture	3
CS 5313	Formal Language Theory	3
CS 5323	Design and Implementation of Operating Systems II	3
CS 5413	Data Structures and Algorithm Analysis II	3
CS 5513	Numerical Computation	3
Hours Subtotal		15
Research Specialization		
Select 12 hours from one area of CS at the 6000 level, excluding CS 6000.		12
Hours Subtotal		12
Secondary Area of Study		
Select 6 hours in one area of CS at the 6000 level, outside the area of specialization and excluding CS 6000.		6
Hours Subtotal		6
Electives ^{3,4}		
Select 6 hours of elective CS courses at the 5000-level or above.		6
Hours Subtotal		6
Other Requirements		
CS 6000	Doctoral Dissertation	21
Hours Subtotal		21
Total Hours		60

¹ For Ph.D. students who have not earned a master's degree, at most one grade of "C" in a core course is acceptable providing it is offset by a grade of "A" in another core course.

² A student who has completed a master's degree at another university may petition to have one or more of the OSU core courses waived in favor of equivalent graduate-level course(s) taken elsewhere. The question of whether or not a course at another university is equivalent to an OSU core course is entirely up to the judgment of the department.

³ These elective hours cannot include any courses claimed Core Requirements, Research Specialization or Secondary Area of Study, nor may they include any courses used on the plan of study for a master's degree, nor may they include any hours of CS 5000 or of CS 6000.

⁴ Students who have not completed a master's degree must satisfy the above elective requirements in this item plus the elective requirements for the master's degree (under the thesis option) in this department.

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General

Counseling Psychology, PhD

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 117

Code	Title	Hours
General Psychology Core		
<i>History and Systems of Psychology</i>		
FDEP 6133	History and Systems of Psychology	3
<i>Biological Bases of Behavior</i>		
EPSY 5320	Seminar in Educational Psychology ¹	3
or PSYC 6483	Neurobiological Psychology	
<i>Cognitive/Affective Bases of Behavior</i>		
EPSY 6163	Emotion and Cognition	3
<i>Social Bases of Behavior</i>		
FDEP 5183	Theories of Social Psychology	3
or PSYC 6563	Advanced Social Psychology	
<i>Individual Behavior</i>		
CPSY 6153	Personality Theories	3
EPSY 5103	Human Development in Psychology	3
CPSY 5563	Conceptualization and Diagnosis in Counseling	3
or PSYC 5113	Psychopathology	
<i>Psychological Measurement and Assessment</i>		
CPSY 5523	Assessment in Counseling	3
EPSY 5320	Seminar in Educational Psychology	3
CPSY 6123	Adult Personality Assessment	3
Hours Subtotal		30
Counseling Psychology Core		
<i>Theories and Interventions</i>		
CPSY 5553	Theories of Counseling	3
CPSY 6083	Principles of Counseling Psychology	3
CPSY 5453	Vocational and Career Information	3
CPSY 5583	Group Process	3
CPSY 6543	Clinical Supervision	3
CPSY 6553	Advanced Practice in Marital and Family Treatment	3
<i>Professionalism and Ethics</i>		
CPSY 6053	Ethical and Legal Issues in Professional Psychology	3
<i>Multicultural Counseling</i>		
CPSY 5503	Multicultural Counseling	3
<i>Supervised Practicum Experiences</i>		
CPSY 5593	Counseling Practicum	3
CPSY 6413	Counseling Psychology Practicum I	3
CPSY 6423	Counseling Psychology Practicum II	3
CPSY 6433	Counseling Psychology Practicum III	3
CPSY 6443	Counseling Psychology Practicum IV	3
<i>Doctoral Dissertation Hours (15 Minimum)</i>		
CPSY 6000	Doctoral Dissertation	15
<i>Internship</i>		

CPSY 6560	Advanced Internship in Counseling	6
Hours Subtotal		60
Research Core		
<i>Statistics and Methods of Research and Evaluation</i>		
REMS 5013	Research Design and Methodology	3
REMS 5953	Statistical Methods in Education	3
<i>Quantitative Statistics Core</i>		
REMS 6003	Analyses of Variance	3
REMS 6013	Multiple Regression Analysis in Behavioral Studies	3
REMS 6373	Program Evaluation	3
or REMS 6663	Applied Multivariate Research in Behavioral Studies	
or REMS 6023	Psychometric Theory	
<i>Qualitative Research Core</i>		
SCFD 5913	Introduction to Qualitative Inquiry	3
or SOC 5273	Qualitative Research Methods	
Hours Subtotal		18
Electives		
3 at 3 credits each		
Hours Subtotal		9
Total Hours		117

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Crop Science, PhD

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 60 (Beyond the Master's Degree)

Code	Title	Hours
Required Courses		
PLNT 5020	Graduate Seminar ¹	1
PLNT 5020	Graduate Seminar ¹	1
SOIL 5131	Professional Development Colloquium in Plant and Soil Sciences	1
SOIL 5120	Teaching Practicum in Plant and Soil Sciences	1
Additional Coursework Hours		23
Hours Subtotal		27
Additional Coursework		
Required Minimum Thesis Credit Hours		15
Additional Minimum Coursework or Thesis Credit Hours		18
Hours Subtotal		33
Total Hours		60

¹ This course is to be taken two separate times during the student's studies. The first seminar will consist of a topic agreed upon by the student and professor in charge of PLNT 5020 and should be relevant to a current controversy, significant research discovery, or other important issue related to Oklahoma or world agriculture. The second seminar will consist of a presentation of the student's research.

Crop Science Requirements

- No more than 15 credit hours of 3000- or 4000-level courses can be approved for graduate credit.
- No more than 6 credit hours of PLNT 5110 and PLNT 6010 can be approved for graduate credit.
- 18 additional credit hours as coursework, dissertation hours (PLNT 6000) or research hours (PLNT 5230 - maximum of 8 credit hours total) can be granted toward graduation.
- All students must indicate on their plans of study whether or not their research will involve human subjects. If human subjects are to be used, approval must be received from the Institutional Research Board (IRB) prior to the beginning of the research.

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Curriculum Studies: College Curriculum and Teaching, PhD

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 63 (Beyond the Master's degree)

Code	Title	Hours
Required Common Core		
CIED 6053	Advanced Curriculum Studies	3
CIED 6063	Curriculum History	3
CIED 6033	Analysis of Teaching	3
CIED 6043	Curriculum Leadership	3
Hours Subtotal		12
Research and Inquiry		
<i>Research Inquiry Core</i>		
CIED 6163	Advanced Research Strategies in Curriculum	3
<i>Extended Inquiry</i>		
Students select appropriate courses in consultation with their advisor and dissertation committee.		
Select 9 hours - examples of courses are the following:		9
CIED 6073	Advanced Pedagogical Research	
CIED 6253	Designing and Conducting Mixed Methods Research	
EDLE 6853	Research Traditions in Educational Leadership	
HESA 6853	Research Traditions in Higher Education and Student Affairs	
HIST 5023	Historical Methods	
REMS 5373	Educational Measurements	
REMS 6003	Analyses of Variance	
REMS 6013	Multiple Regression Analysis in Behavioral Studies	
REMS 6663	Applied Multivariate Research in Behavioral Studies	
SCFD 6113	Theoretical Foundations of Inquiry	
SCFD 6123	Qualitative Research I	
SCFD 6190	Qualitative Research: Selected Methods	
SCFD 6193	Qualitative Research II	
SOC 5273	Qualitative Research Methods	
STAT 5043	Sample Survey Designs	
Hours Subtotal		12
Specialization		
Select 6-15 credit hours (Specialization and Cognate courses adding to 24 hours minimum).		
Students select appropriate courses in consultation with their advisor and dissertation committee. Examples of courses are the following:		
HESA 6713	Effective Teaching in College and Universities	
CIED 6133	Theory to Practice in Education	
CIED 6073	Advanced Pedagogical Research	

CIED 6183	Advanced Media Literacy Across the Curriculum	
CIED 6040	Special Topics in College Curriculum and Teaching	
HESA 6583	The Impact of College on Students and Society	
HESA 6753	Historical Development of Higher Education	
HESA 6843	The Academic Department	
SCFD 6983	Diversity and Equity Issues in Education	
SCFD 6883	Transforming Pedagogies	
Cognate/Electives		
Select 9-18 credit hours (Specialization and Cognate courses adding to 24 hours minimum).		
Students select appropriate related courses according to their interests in consultation with their advisor and dissertation committee. These are to be graduate courses available at Oklahoma State University. Subject electives with the advisor's approval.		
Hours Subtotal		24
Dissertation Research		
CIED 6000	Doctoral Dissertation	15
Total Hours		63

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Curriculum Studies: Curriculum and Leadership, PhD

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 63

Code	Title	Hours
Required Common Core		
CIED 6053	Advanced Curriculum Studies	3
CIED 6063	Curriculum History	3
CIED 6033	Analysis of Teaching	3
CIED 6043	Curriculum Leadership	3
Hours Subtotal		12
Research and Inquiry		
<i>Research Inquiry Core</i>		
CIED 6163	Advanced Research Strategies in Curriculum	3
<i>Extended Inquiry</i>		
Students select appropriate courses in consultation with their advisor and dissertation committee.		
Select 9 hours - examples of courses are the following:		9
CIED 6073	Advanced Pedagogical Research	
CIED 6253	Designing and Conducting Mixed Methods Research	
EDLE 6853	Research Traditions in Educational Leadership	
HESA 6853	Research Traditions in Higher Education and Student Affairs	
HIST 5023	Historical Methods	
REMS 5373	Educational Measurements	
REMS 6003	Analyses of Variance	
REMS 6013	Multiple Regression Analysis in Behavioral Studies	
REMS 6663	Applied Multivariate Research in Behavioral Studies	
SCFD 6113	Theoretical Foundations of Inquiry	
SCFD 6123	Qualitative Research I	
SCFD 6190	Qualitative Research: Selected Methods	
SCFD 6193	Qualitative Research II	
SOC 5273	Qualitative Research Methods	
STAT 5043	Sample Survey Designs	
Hours Subtotal		12
Specialization		
Select 15 credit hours.		15
Students select appropriate courses in consultation with their advisor and dissertation committee. Examples of courses are the following:		
CIED 6073	Advanced Pedagogical Research	
CIED 6133	Theory to Practice in Education	
CIED 6143	School Reform	

CIED 6183	Advanced Media Literacy Across the Curriculum	
CIED 6030	Contemporary Issues in Curriculum Studies	
LLCE 6683	Language, Literacy and Culture	
SCFD 6983	Diversity and Equity Issues in Education	
CIED 5123	Curriculum in the Secondary School	
CIED 5313	Curriculum of the Elementary School	
Cognate/Electives		
Select 9 credit hours.		9
Students select appropriate related courses according to their interests in consultation with their advisor and dissertation committee. These are to be graduate courses available at Oklahoma State University.		
Hours Subtotal		24
Dissertation Research		
CIED 6000	Doctoral Dissertation	15
Hours Subtotal		15
Total Hours		63

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Curriculum Studies: International and Peace Curriculum, PhD

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 63

Code	Title	Hours
Required Common Core		
CIED 6053	Advanced Curriculum Studies	3
CIED 6063	Curriculum History	3
CIED 6033	Analysis of Teaching	3
CIED 6043	Curriculum Leadership	3
Hours Subtotal		12
Research and Inquiry		
<i>Research Inquiry Core</i>		
CIED 6163	Advanced Research Strategies in Curriculum	3
<i>Extended Inquiry</i>		
Students select appropriate courses in consultation with their advisor and dissertation committee.		
Select 9 hours - examples of courses are the following:		9
CIED 6073	Advanced Pedagogical Research	
CIED 6253	Designing and Conducting Mixed Methods Research	
EDLE 6853	Research Traditions in Educational Leadership	
HESA 6853	Research Traditions in Higher Education and Student Affairs	
HIST 5023	Historical Methods	
REMS 5373	Educational Measurements	
REMS 6003	Analyses of Variance	
REMS 6013	Multiple Regression Analysis in Behavioral Studies	
REMS 6663	Applied Multivariate Research in Behavioral Studies	
SCFD 6113	Theoretical Foundations of Inquiry	
SCFD 6123	Qualitative Research I	
SCFD 6190	Qualitative Research: Selected Methods	
SCFD 6193	Qualitative Research II	
SOC 5273	Qualitative Research Methods	
STAT 5043	Sample Survey Designs	
Hours Subtotal		12
Specialization		
Select 15 credit hours.		15
Students select appropriate courses in consultation with their advisor and dissertation committee. Examples of courses are the following:		
CIED 6053	Advanced Curriculum Studies	
CIED 6173	International Peace Curriculum Development	
CIED 6030	Contemporary Issues in Curriculum Studies	1

or CIED 6040	Special Topics in College Curriculum and Teaching	
CIED 5723	Gender and Curriculum	
CPSY 5503	Multicultural Counseling	
CPSY 6223	Beck's Cognitive Therapy	
HESA 6163	International Issues in Higher Education	
SCFD 6983	Diversity and Equity Issues in Education	
SOC 6463	International Issues in Environmental Sociology	
PHIL 5343	Seminar in East and West Comparative Philosophy	
SOC 5323	Seminar on Collective Behavior and Social Movements	
SOC 5493	Seminar in Environmental Justice	

Cognate/Electives

Select 9 credit hours. 9

Students select appropriate related courses according to their interests in consultation with their advisor and dissertation committee. These are to be graduate courses available at Oklahoma State University.

Hours Subtotal

Dissertation Research

CIED 6000 Doctoral Dissertation 15

Hours Subtotal 39

Total Hours 63

¹ CIED 6030 or CIED 6040 can be taken with advisor approval.

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Economics, PhD

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 64

Code	Title	Hours
Degree Core		
<i>Required Courses</i>		
ECON 5033	Macroeconomic Analysis	3
ECON 5213	Introduction to Econometrics	3
ECON 6000	Research and Thesis	16
ECON 6013	Microeconomic Theory I	3
ECON 6023	Microeconomic Theory II	3
ECON 6033	Macroeconomic Theory I	3
ECON 6043	Macroeconomic Theory II	3
ECON 6213	Econometrics I	3
ECON 6233	Time Series Econometrics	3
ECON 6243	Econometrics II	3
ECON 6323	Mathematical Economics I	3
ECON 6613	International Finance	3
ECON 6623	Economic Development I	3
ECON 6633	International Trade	3
ECON 6643	Economic Development II	3
ECON 6903	Regional Economic Analysis and Policy	3
ECON 6913	Urban Economics	3
Hours Subtotal		64
Other Requirements		
Microeconomic Theory Prelim		
Macroeconomic Theory Prelim		
Third-Year Paper		
Total Hours		64

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Education: Educational Administration, EdS

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 36 (Beyond the Master's Degree)

Code	Title	Hours
General EDLE Doctoral Core		
EDLE 6483	School Leadership, Culture and Ethics	3
EDLE 6493	School Improvement/Reform	3
EDLE 6633	School Leadership and Community Collaboration	3
Hours Subtotal		9
Emphasis Core		
EDLE 6453	Special Topics in Education Law	3
EDLE 6353	The Superintendency	3
EDLE 6363	Special Topics in School Finance Policy	3
EDLE 6423	The Politics of Education	3
or EDLE 6393	The Human Factor in Administering Schools	
EDLE 6603	Organizational Theory in Education	3
or EDLE 5953	Developing Educational Organizations	
Hours Subtotal		15
Research and Inquiry		
EDLE 6853	Research Traditions in Educational Leadership	3
SCFD 6123	Qualitative Research I	3
or REMS 6373	Program Evaluation	
Hours Subtotal		6
Fieldwork		
EDLE 6883	Internship in Education I	3
EDLE 6893	Internship in Education II	3
Hours Subtotal		6
Required Component: Portfolio ¹		
The Portfolio, designed and completed by Candidates to exhibit competency in the ELCC Standards, serves as the Required Component for the Ed.S. degree in School Administration; satisfactory completion of the Portfolio is required for degree completion and recommendation for certification.		
Total Hours		36

¹ Designates prerequisites.

Graduate College Specialist in Education (EdS) Requirements

Learn more about Graduate College 2021-2022 Specialist in Education (EdS) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Education: Language, Literacy and Culture, PhD

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 69

Code	Title	Hours
Common Program Core		
SCFD 6983	Diversity and Equity Issues in Education	3
SCFD 6113	Theoretical Foundations of Inquiry	3
CIED 6503	Doctoral Seminar	3
Hours Subtotal		9
Research Methods		
Select 12 hours from courses such as these:		12
CIED 6073	Advanced Pedagogical Research	
CIED 6253	Designing and Conducting Mixed Methods Research	
REMS 6003	Analyses of Variance	
REMS 6013	Multiple Regression Analysis in Behavioral Studies	
REMS 6023	Psychometric Theory	
REMS 6033	Factor Analysis in Behavioral Research	
REMS 6663	Applied Multivariate Research in Behavioral Studies	
REMS 5963	Computer Applications in Nonparametric Data Analyses	
SCFD 6123	Qualitative Research I	
SCFD 6190	Qualitative Research: Selected Methods	
SCFD 6193	Qualitative Research II	
Hours Subtotal		12
Language, Literacy and Culture Option		
Select 24 hours from the following:		24
CIED 5463	Reading Assessment and Instruction	
CIED 5473	Reading & Writing Difficulties	
CIED 5733	History of Reading	
CIED 5850	Directed Study	
CIED 6060	Advanced Special Topics in Literacy Education	
LLCE 6083	Seminar in Writing Pedagogy	
LLCE 6093	English Language Learners: Theory, Research, Policy and Practice	
LLCE 6193	21st Century Literacies: Theory, Research, and Practice	
CIED 6433	Seminar in Literacy	
LLCE 6513	Staff Development in Literacy Education	
LLCE 6653	Issues and Trends in Adolescent Literacy	
LLCE 6673	Theory and Research on Teaching Contemporary Children's and YA Literature	
LLCE 6683	Language, Literacy and Culture	
CIED 6880	Internship in Education (Internship for Teacher Educators)	

CIED 6880	Internship in Education (Internship in Literacy Research Methodologies)	
Hours Subtotal		24
Independent Research		
CIED 6000	Doctoral Dissertation	15
Hours Subtotal		15
Electives/Cognate		
The doctoral advisory committee will work with individual students to select the most appropriate courses to enhance their knowledge within their specializations.		9
Hours Subtotal		9
Total Hours		69

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Education: Learning, Design and Technology, PhD

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 69

Code	Title	Hours
Common Core		
(Plan to take these 1st or 2nd semester)		
SCFD 6983	Diversity and Equity Issues in Education	3
SCFD 6113	Theoretical Foundations of Inquiry	3
CIED 6503	Doctoral Seminar	3
Hours Subtotal		9
Research Courses		
Select 12 hours from the following:		12
REMS 6003	Analyses of Variance	
REMS 6013	Multiple Regression Analysis in Behavioral Studies	
SCFD 6123	Qualitative Research I	
SCFD 6193	Qualitative Research II	
CIED 6253	Designing and Conducting Mixed Methods Research	
CIED 6073	Advanced Pedagogical Research	
Hours Subtotal		12
Specialization		
Select 24 hours from the following:		24
EDTC 5203	Foundations of Educational Technologies	
EDTC 5503	Facilitating Online Learning	
EDTC 6153	Advanced Computer-Based Instructional Development	
EDTC 6333	Human Computer Interaction	
EDTC 6423	Trends and Issues in Educational Technology	
CIED 6183	Advanced Media Literacy Across the Curriculum	
EDTC 6613	Instructional Systems Design	
EDTC 6553	Media and Learning in Educational Technology	
EDTC 6283	Performance Improvement Technology	
EDTC 6850	Directed Reading	
EDTC 6880	Internship in Education	
EDTC 6910	Practicum	
Hours Subtotal		24

Cognate Area of Study

Note: The Graduate Certificate in Online Teaching can be used as a cognate (must apply through the Graduate College since this is a separate program).

Select 9 hours from the following: 9

EDTC 5053	Learning in a Digital Age	
EDTC 5103	Advanced Computing Applications in Education	

EDTC 5153	Computer-Based Instruction Development	
EDTC 5503	Facilitating Online Learning	
Hours Subtotal		9
Dissertation		
EDTC 6000	Doctoral Dissertation	15
Hours Subtotal		15
Total Hours		69

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Education: Mathematics Education, PhD

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 69 (Beyond the Master's Degree)

Code	Title	Hours
Common Program Core		
SCFD 6983	Diversity and Equity Issues in Education	3
SCFD 6113	Theoretical Foundations of Inquiry	3
CIED 6503	Doctoral Seminar	3
Hours Subtotal		9
Extended Inquiry		
At least six of these hours, selected from courses such as those listed below, should be comprised of the same type of research method (i.e., quantitative, qualitative, historical, etc.). Students should work with their advisory committee to select the appropriate 12 hours for their program of study.		12
CIED 6073	Advanced Pedagogical Research	
CIED 6253	Designing and Conducting Mixed Methods Research	
REMS 6003	Analyses of Variance	
REMS 6013	Multiple Regression Analysis in Behavioral Studies	
REMS 6023	Psychometric Theory	
REMS 6033	Factor Analysis in Behavioral Research	
REMS 6663	Applied Multivariate Research in Behavioral Studies	
REMS 5963	Computer Applications in Nonparametric Data Analyses	
SCFD 6123	Qualitative Research I	
SCFD 6190	Qualitative Research: Selected Methods	
SCFD 6193	Qualitative Research II	
MATH 5913	Introduction to Research in Mathematics Education	
MATH 6923	Research in Undergraduate Mathematics Education	
Hours Subtotal		12
Cognate Area		
The doctoral advisory committee will work with individual students to select the most appropriate courses to enhance their knowledge within their specializations.		9
Hours Subtotal		9
Independent Research		
CIED 6000	Doctoral Dissertation	15
Hours Subtotal		15
Specialization - Mathematics Education		
<i>Required Courses</i>		
SMED 6223	Instruction and Learning in Science and Mathematics Education	3
SMED 6233	Affective Issues in Teaching Mathematics and Sciences	3

SMED 6753	Research in Mathematics and Science Education	3
<i>Elective Courses</i>		
Select 15 hours from the following:		15
CIED 5850	Directed Study	
CIED 6910	Practicum	
CIED 6850	Directed Reading	
SMED 5253	Teaching Rational Number Concepts, Proportional Reasoning, and Classroom Interactions	
SMED 5263	Assessment and Evaluation in School Mathematics	
SMED 5270	Practicum in School Mathematics	
SMED 5273	Number Concepts and Assessment at the Elementary Level (PK-6)	
SMED 5283	Problem-Centered Learning in Mathematics	
SMED 5293	Teaching and Learning Mathematics in Technology	
SMED 5613	Effective Teaching of Mathematics in the Secondary School	
SMED 5750	Seminar in Mathematics Education	
SMED 5913	Teaching Geometry and Spatial Visualization	
SMED 5923	Teaching Algebra and Mathematical Tasks	
SMED 5933	Teaching Data and Probability in Schools	
SMED 5943	Mathematics Leadership and Coaching	
Hours Subtotal		24
Total Hours		69

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Education: School Psychology, EdS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 83¹

Code	Title	Hours
Required Courses		
SPSY 5023	Introduction to School Psychology	3
SPSY 5113	Developmental Psychopathology	3
EPSY 5103	Human Development in Psychology	3
REMS 5013	Research Design and Methodology	3
SPSY 5110	Observation and Participation Field Experience for School Psychology Majors	2
SPSY 5793	Individual Intellectual Assessment of Children and Youth	3
REMS 6003	Analyses of Variance	3
SPSY 5000	Master's Thesis ¹	2
SPSY 6313	Advanced Interventions for Increased Academic Achievement	3
SPSY 6143	Introduction to Developmental Psychopharmacology	3
SPSY 5803	Advanced Cognitive Assessment and Theory	3
FDEP 5493	Psychology of Learning and Behavior	3
SPSY 6333	Instructional Assessment and Consultation	3
SPSY 5853	Applied Behavior Analysis	3
SPSY 5210	Introductory Practicum in School Psychology	4
SPSY 5813	Parent and Family Intervention in School Psychology	3
SPSY 6343	Behavioral Assessment and Consultation	3
SPSY 6113	Behavioral and Personality Assessment of Children and Youth	3
FDEP 5183	Theories of Social Psychology	3
SPSY 6253	Single Case Designs in Behavior Analytic Settings	3
SPSY 5873	Applied Behavior Analysis II	3
SPSY 5510	Advanced Practicum in School Psychology	6
SPSY 6033	Introduction to Psychotherapy with Children and Adolescents	3
<i>Creative Component</i>		
SPSY 5503	Crisis Intervention and Emergency Action in School Settings	3
SPSY 5310	Practicum in Child and Adolescent Therapy	3
SPSY 6210	Specialist Internship in School Psychology	6
Total Hours		83

Graduate College Specialist in Education (EdS) Requirements

Learn more about Graduate College 2021-2022 Specialist in Education (EdS) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

¹ If formal report option is selected, then total hours for degree program increase by four.

Education: Science Education, PhD

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 69 (Beyond the Master's Degree)

Code	Title	Hours
Common Program Core		
SCFD 6983	Diversity and Equity Issues in Education	3
SCFD 6113	Theoretical Foundations of Inquiry	3
CIED 6503	Doctoral Seminar	3
Hours Subtotal		9
Extended Inquiry		
At least six of these hours, selected from courses such as those listed below, should be composed of the same type of research method (i.e., quantitative, qualitative, historical, etc.). Students should work with their advisory committee to select the appropriate 12 hours for their program of study.		12
CIED 6073	Advanced Pedagogical Research	
CIED 6253	Designing and Conducting Mixed Methods Research	
REMS 6003	Analyses of Variance	
REMS 6013	Multiple Regression Analysis in Behavioral Studies	
REMS 6023	Psychometric Theory	
REMS 6033	Factor Analysis in Behavioral Research	
REMS 6663	Applied Multivariate Research in Behavioral Studies	
REMS 5963	Computer Applications in Nonparametric Data Analyses	
SCFD 6123	Qualitative Research I	
SCFD 6190	Qualitative Research: Selected Methods	
SCFD 6193	Qualitative Research II	
Hours Subtotal		12
Cognate Area		
The doctoral advisory committee will work with individual students to select the most appropriate courses to enhance their knowledge within their specializations.		9
Hours Subtotal		9
Independent Research		
CIED 6000	Doctoral Dissertation	15
Hours Subtotal		15
Specialization - Science Education		
<i>Required Courses</i>		
SMED 6223	Instruction and Learning in Science and Mathematics Education	3
SMED 6233	Affective Issues in Teaching Mathematics and Sciences	3
SMED 6753	Research in Mathematics and Science Education	3
<i>Electives</i>		
Select 15 hours from the following:		15
CIED 5850	Directed Study	

CIED 6910	Practicum	
CIED 6850	Directed Reading	
CIED 5720	Education Workshop	
CIED 5850	Directed Study	
CIED 6850	Directed Reading	
CIED 6910	Practicum	
SMED 5050	Seminar in Integrated Mathematics and Science Applications	
SMED 5193	Inquiry and Problem-Based Learning in Science Education	
SMED 5223	Teaching Science in the Schools	
SMED 5243	Environmental Education in the Curriculum	
SMED 5280	Workshop in Science Education	
SMED 5313	Introduction to K-12 Engineering Education	
SMED 5323	Technology for the K-12 STEM Educator	
SMED 5333	Developing Informal and Formal STEM Programs in Schools	
SMED 5813	Assessment in Science Education	
SMED 6123	Teaching the Nature of Science in Secondary Science Education	
Hours Subtotal		24
Total Hours		69

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Education: Social Foundations of Education, PhD

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 69

Code	Title	Hours
Common Program Core		
(Typically taken within the first 3 semesters)		
SCFD 6983	Diversity and Equity Issues in Education	3
SCFD 6113	Theoretical Foundations of Inquiry	3
CIED 6503	Doctoral Seminar	3
Hours Subtotal		9
Research Courses		
12 credit hours, at least one qualitative and one quantitative course at 6000-level. (Note: all 6000-level REMS quantitative courses require prerequisites of REMS 5013 and REMS 5953, which will not count toward the 69 total hours). Only one 5000-level course (excluding REMS 5013 and REMS 5953) may count toward the required coursework in this category.		
Pending committee approval, appropriate courses include the following:		12
CIED 6073	Advanced Pedagogical Research	
CIED 6163	Advanced Research Strategies in Curriculum	
CIED 6253	Designing and Conducting Mixed Methods Research	
EDLE 6910	Practicum (May only be taken the last term of coursework)	
HIST 5023	Historical Methods	
HIST 6023	Historiography	
REMS 6373	Program Evaluation	
REMS 6383	Program Evaluation II	
Quantitative Approaches		
REMS 6003	Analyses of Variance ¹	
REMS 6013	Multiple Regression Analysis in Behavioral Studies ²	
REMS 6663	Applied Multivariate Research in Behavioral Studies ³	
STAT 5033	Nonparametric Methods	
STAT 5043	Sample Survey Designs	
Qualitative Methodologies		
GEOG 5423	Geographic Renderings in Qualitative Methods	
SCFD 5913	Introduction to Qualitative Inquiry	
SCFD 6123	Qualitative Research I	
SCFD 6163	Ethnography	
SCFD 6173	Visual Methodologies	
SCFD 6183	Narrative Research Methodologies	
SCFD 6190	Qualitative Research: Selected Methods	
SCFD 6193	Qualitative Research II	
SOC 6853	Seminar in Symbolic Interactionism	

Hours Subtotal		12
Social Foundations Core		
24 credit hours, at least one 6000-level course (except for SCFD 5713, SCFD 5883) from each of the four areas of Social Foundations: Philosophy of Education, History of Education, Anthropology of Education, and Sociology of Education.		24
SCFD 5023	The Comparative Approach: Theory, Method, and Practice	
SCFD 5123	History of Education	
SCFD 5713	Educational Philosophy ⁴	
SCFD 5883	Educational Sociology ⁴	
SCFD 6853	Anthropology of Education ⁴	
SCFD 5873	Culture, Society and Education	
SCFD 5923	Popular Culture and Education	
SCFD 5990	Problems and Issues in Social Foundations	
SCFD 6023	Comparative Education	
SCFD 6443	Ethics and Moral Education	
SCFD 6850	Directed Reading	
SCFD 6883	Transforming Pedagogies	
SCFD 6630	Topics in Philosophy Education	
SCFD 6990	Seminar in Social Foundations	
Hours Subtotal		24
Cognate Area		
Students take 9 credit hours in a concentration or cognate area based on their research interest and in consultation with their advisor and dissertation committee. These areas are available at Oklahoma State University, especially in the College of Education, Health and Aviation and the College of Arts and Sciences. They can be, but are not limited to, the following areas:		9
History; Philosophy; Sociology; International Studies; Comparative Education; Gender and Women's Studies; Higher Education; Educational Administration; Educational Technology; Pedagogy; STEM Education; College Teaching; Qualitative Inquiry; Research, Evaluation, Measurement, and Statistics; Special Education; Curriculum Studies; Media and Culture		
Hours Subtotal		9
Independent Research		
CIED 6000	Doctoral Dissertation	15
Hours Subtotal		15
Total Hours		69

¹ Requires REMS 5013 and REMS 5953 as prerequisites.

² Requires REMS 6003 as prerequisite.

³ Requires REMS 6013 as prerequisite.

⁴ Must take if no equivalent course has been taken in Master's program.

Education: Social Foundations of Education Requirements

- All students admitted into the Ph.D. degree option in Social Foundations are expected to meet all university requirements and the requirements for admission to the Ph.D. in Education. Students with little or no background in social foundations may be required to take additional leveling coursework. The Social Foundations admission committee determines such prerequisite considerations. Specific

graduate courses that may be required as a leveling course include SCFD 5223, SCFD 5873, SCFD 5923, SCFD 5990, SCFD 5998.

- Students will be expected to use technology resources appropriately in course projects, assignments, and research. Ph.D. in Education (69 credit hours minimum, with typically no more than two 5000-level courses (in addition to SCFD 5713, SCFD 5883, if these courses are taken as part of Ph.D. coursework). Leveling courses are not included in the 69 hours.)

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Education: Special Education, PhD

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 69

Code	Title	Hours
Required Core		
CIED 6503	Doctoral Seminar	3
SCFD 6113	Theoretical Foundations of Inquiry	3
SCFD 6983	Diversity and Equity Issues in Education	3
Hours Subtotal		9
Research		
Choose 12 hours from the following (must include one quantitative and one qualitative course):		12
CIED 6073	Advanced Pedagogical Research	
CIED 6253	Designing and Conducting Mixed Methods Research	
REMS 6003	Analyses of Variance	
REMS 6013	Multiple Regression Analysis in Behavioral Studies	
REMS 6023	Psychometric Theory	
REMS 6033	Factor Analysis in Behavioral Research	
REMS 6663	Applied Multivariate Research in Behavioral Studies	
REMS 5963	Computer Applications in Nonparametric Data Analyses	
SCFD 6123	Qualitative Research I	
SCFD 6190	Qualitative Research: Selected Methods	
SCFD 6193	Qualitative Research II	
Hours Subtotal		12
Cognate or Electives with a Thematic Focus		
Select 9 hours		9
Hours Subtotal		9
Specialization		
Select 24 hours from the following:		24
SPED 6183	Legal Aspects in Special Education	
SPED 6543	School and Interagency Collaboration	
SPED 6603	Current Trends and Issues in Special Education	
SPED 6743	Single Subject Design in Special Education	
SPED 6880	Internship in Education	
SPED 6850	Directed Reading	
SPED 5993	Culturally Responsive Teaching in Special Education	
SPSY 6333	Instructional Assessment and Consultation	
EPSY 6323	Psychological Consultation	
Hours Subtotal		24
Dissertation		
CIED 6000	Doctoral Dissertation	15

Hours Subtotal	15
Total Hours	69

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Education: Workforce and Adult Education, PhD

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 72

Code	Title	Hours
Required Courses		
SCFD 6983	Diversity and Equity Issues in Education	3
SCFD 6113	Theoretical Foundations of Inquiry	3
Hours Subtotal		6
Extended Inquiry		
Select 12 hours from the following:		12
REMS 6003	Analyses of Variance	
REMS 6013	Multiple Regression Analysis in Behavioral Studies	
SCFD 6123	Qualitative Research I	
SCFD 6190	Qualitative Research: Selected Methods	
SCFD 6193	Qualitative Research II	
Other courses as appropriate and available		
Hours Subtotal		12
Specialization Structure (Core for WAED)		
WAED 6103	Philosophy of Workforce and Adult Education	3
WAED 6233	Managing Knowledge in Learning Organizations	3
CIED 6503	Doctoral Seminar	3
WAED 6353	Future of Technology, Work and Society	3
WAED 5010	Seminar	3
Hours Subtotal		15
Specialization Electives		
Select 15 hours from the following:		15
WAED 5123	Evaluation of Workforce and Adult Education Programs and Instruction	
WAED 5133	Internationalism, Globalization and Workforce Education	
WAED 5153	Curriculum Planning in Workforce and Adult Education	
WAED 5233	Advanced Instructional Procedures in Workforce and Adult Education	
WAED 5313	History, Principles, and Organization of Workforce Education	
WAED 5333	Administration and Supervision of Workforce Education Programs	
WAED 5340	Special Problems in Workforce and Adult Education	
WAED 5423	Individualized Competency Based Instruction and Customized Training	
WAED 5720	Workshop	
WAED 5910	Developing and Analyzing Teaching Content	
WAED 6343	Financing Workforce and Adult Education	

WAED 6880	Doctoral Internship in Workforce and Adult Education	
Others by permission of doctoral committee chair		
Hours Subtotal		15
Cognate Area		
Coursework comprising a cognate area can come from inside the College of Education, Health and Aviation or from outside the College. Courses selected for the cognate need approval of the doctoral committee chair and must be 5000- and 6000-level courses.		9
Hours Subtotal		9
Independent Research		
WAED 6000	Doctoral Dissertation	15
Hours Subtotal		15
Research and Scholarship Preparation		
In addition to the requirements listed above for degree completion, students must have (a) presented at a professional conference and (b) submitted an article for refereed publication. Faculty will support and mentor candidates through these processes.		
Total Hours		72

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Educational Leadership and Policy Studies: Educational Administration, PhD

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 72

Code	Title	Hours
General EDLE Doctoral Core		
EDLE 6483	School Leadership, Culture and Ethics	3
EDLE 6493	School Improvement/Reform	3
EDLE 6603	Organizational Theory in Education	3
Hours Subtotal		9
Inquiry Core		
EDLE 6853	Research Traditions in Educational Leadership	3
SCFD 6123	Qualitative Research I	3
SCFD 6193	Qualitative Research II ¹	3
REMS 6003	Analyses of Variance ¹	3
Select 6 hours from the following		6
REMS 6013	Multiple Regression Analysis in Behavioral Studies ¹	
REMS 6373	Program Evaluation ¹	
REMS 5373	Educational Measurements ¹	
Hours Subtotal		18
Option Area: Educational Administration		
<i>Required Core</i>		
EDLE 6423	The Politics of Education	3
EDLE 6453	Special Topics in Education Law	3
EDLE 6363	Special Topics in School Finance Policy	3
<i>Electives</i>		
Select 9 hours from the following:		9
EDLE 6003	Educational Ideas	
EDLE 6343	Problem Solving in School Administration	
EDLE 6353	The Superintendency	
EDLE 6393	The Human Factor in Administering Schools	
EDLE 6633	School Leadership and Community Collaboration	
EDLE 6650	Problems in Educational Administration (The Business Function)	
EDLE 6650	Problems in Educational Administration (Special Topics in Facilities)	
EDLE 6650	Problems in Educational Administration (Planning and Educational Change)	
REMS 5953	Statistical Methods in Education	
Hours Subtotal		18
Cognate or Electives with a Thematic Focus		
Select 12 hours		12
Independent Research (Dissertation)		

Minimum of 15 hours	15
Total Hours	72

¹ Alternate research courses may be taken with committee approval.

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Educational Leadership and Policy Studies: Higher Education, PhD

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 63 (beyond the Master's degree)

Code	Title	Hours
Required Core		
HESA 6603	Organizational Theory and Administration of the Higher Education Organization	3
HESA 6823	Educational Leadership	3
Hours Subtotal		6
Inquiry Core		
HESA 6853	Research Traditions in Higher Education and Student Affairs	3
SCFD 6123	Qualitative Research I	3
REMS 5953	Statistical Methods in Education	3
REMS 6003	Analyses of Variance ¹	3
Select 3 hours from the following:		3
REMS 6013	Multiple Regression Analysis in Behavioral Studies ¹	
SCFD 6193	Qualitative Research II ¹	
Hours Subtotal		15
Higher Education Administration Option		
<i>Required Core</i>		
HESA 6233	Critical Issues in Higher Education and Student Affairs	3
HESA 6463	Higher Education Law	3
HESA 6553	Public Policy and Higher Education	3
HESA 6753	Historical Development of Higher Education	3
<i>Elective or Cognate ²</i>		
Select 9 hours from the following (or other courses approved by the doctoral committee): ²		9
HESA 5343	Assessment Techniques for Higher Education and Student Affairs Professionals	
HESA 6163	International Issues in Higher Education	
HESA 6243	Internship in Higher Education and Student Affairs I	
HESA 6573	Institutional Research and Policy Analysis	
HESA 6583	The Impact of College on Students and Society	
HESA 6683	The Community Junior College	
HESA 6703	Finance in Higher Education	
HESA 6713	Effective Teaching in College and Universities	
HESA 6733	Planning and Educational Change	
HESA 6833	College and University Presidency	
HESA 6843	The Academic Department	
HESA 6850	Directed Readings in Higher Education and Student Affairs	

SCFD 6983	Diversity and Equity Issues in Education	
Hours Subtotal		21
Independent Research/Dissertation		
Minimum of 21 hours		21
HESA 6850	Directed Readings in Higher Education and Student Affairs	
HESA 6903	Dissertation Proposal Writing	
HESA 6000	Doctoral Dissertation (Minimum of 15 hours)	
Hours Subtotal		21
Total Hours		63

¹ Denotes classes with prerequisites.

² Electives and any additional courses must be approved by the student's committee.

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Educational Psychology: Educational Psychology, PhD

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 69

Code	Title	Hours
Domain I - Research and Inquiry		
<i>Required Courses for Domain I</i>		
REMS 6003	Analyses of Variance	3
REMS 6013	Multiple Regression Analysis in Behavioral Studies	3
SCFD 6113	Theoretical Foundations of Inquiry	3
Other coursework recommended for expertise in the Research and Inquiry Domain:		9
REMS 5063	Computer Applications in Nonparametric Data Analysis	
REMS 6023	Psychometric Theory	
REMS 6033	Factor Analysis in Behavioral Research	
SCFD 6123	Qualitative Research I	
SCFD 6193	Qualitative Research II	
REMS 6373	Program Evaluation	
REMS 6383	Program Evaluation II	
REMS 6663	Applied Multivariate Research in Behavioral Studies	
REMS 6673	Item Response Theory	
REMS 6683	Multilevel Modeling Methods in Education	
REMS 6693	Structural Equation Modeling for Behavioral and Educational Research	
CIED 6253	Designing and Conducting Mixed Methods Research	
Hours Subtotal		18
Domain II: Foundations of Educational Psychology		
<i>Required Courses</i>		
EPSY 5001	Colloquium: Educational Psychology	1
EPSY 5320	Seminar in Educational Psychology	8
EPSY 6213	Advanced Educational Psychology	3
EPSY 6533	Human Motivation	3
Select at least three courses from the following (two must be 6000-level):		9
EPSY 5403	Issues in Adolescent Development	
EPSY 5473	Psychology of Adult Learning	
EPSY 5603	Developmental Issues in Instruction	
EPSY 5663	Creativity for Teachers	
EPSY 5963	Developing Resources to Support Educational Programs	
EPSY 5983	Instructional Effectiveness in Higher Education	
EPSY 6043	Adult Development	
EPSY 6153	Advanced Research in Educational Psychology	

EPSY 6163	Emotion and Cognition	
EPSY 6443	Theories and Problems in Educational Psychology	
EPSY 6613	Instructional Systems Design	
SCFD 6983	Diversity and Equity Issues in Education	
Hours Subtotal		24
Area of Expertise Domain III:		
Select 12 hours		12
Student-scholars select 12 hours related to an area of expertise based on student career goals, expertise, interest and background. Examples of areas of expertise may derive from the other domains, such as measurement or program evaluation in a specific context; instructional development for students with diverse needs; studies of gender, race, class, ability; multicultural issues in education; adult development or aging learners; social and emotional needs of children, and many others.		
Hours Subtotal		12
Dissertation (Doctoral Thesis)		
EPSY 6000	Doctoral Dissertation	15
Hours Subtotal		15
Total Hours		69

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Educational Psychology: Research, Evaluation, Measurement and Statistics, PhD

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 66 (Beyond the Master's Degree)

Code	Title	Hours
Inquiry Core ¹		
REMS 6003	Analyses of Variance	3
REMS 6013	Multiple Regression Analysis in Behavioral Studies	3
REMS 6023	Psychometric Theory	3
REMS 6373	Program Evaluation	3
REMS 6663	Applied Multivariate Research in Behavioral Studies	3
SCFD 6113	Theoretical Foundations of Inquiry	3
SCFD 6123	Qualitative Research I	3
Hours Subtotal		21
Educational Psychology Degree Core		
Select a minimum of 9 hours:		9
<i>Human Development</i>		
EPSY 5103	Human Development in Psychology	
EPSY 6043	Adult Development	
<i>Learning and Cognition</i>		
EPSY 5463	Psychology of Learning	
EPSY 6163	Emotion and Cognition	
EPSY 6533	Human Motivation	
Hours Subtotal		9
Research, Evaluation, Measurement, and Statistics Specialization		
Select 12 hours from the following, including 9 hours at 6000-level:		12
(The following is not an exhaustive list. Additional relevant coursework may be found in other departments: e.g., PSYC, STAT, SOC, HDFs. Check Catalog for applicable prerequisites.)		
REMS 5373	Educational Measurements	
REMS 5963	Computer Applications in Nonparametric Data Analyses	
REMS 6033	Factor Analysis in Behavioral Research	
REMS 6320	Doctoral Seminar in REMS	
REMS 6383	Program Evaluation II	
REMS 6663	Applied Multivariate Research in Behavioral Studies	
REMS 6673	Item Response Theory	
REMS 6683	Multilevel Modeling Methods in Education	
REMS 6693	Structural Equation Modeling for Behavioral and Educational Research	
REMS 6850	Directed Reading	
STAT 5043	Sample Survey Designs	
SCFD 6190	Qualitative Research: Selected Methods	
SCFD 6193	Qualitative Research II	

Hours Subtotal		12
Cognate Area		
Select minimum of 9 hours:		9
Courses will be selected from one or two cognate areas to develop and improve knowledge and skills in a content and/or methodological area. Following are some examples of cognate areas and relative choices in coursework. This is not an exhaustive list.		
<i>Student Development and Higher Education</i>		
EDLE 5953	Developing Educational Organizations	
<i>Mathematical Sciences</i>		
MATH 5593	Methods of Applied Mathematics	
STAT 5093	Statistical Computing	
STAT 5123	Probability Theory	
STAT 5133	Stochastic Processes	
STAT 5213	Bayesian Analysis	
STAT 6113	Probability Theory	
STAT 6223	Advanced Statistical Inference	
<i>Institutional Research</i>		
STAT 5033	Nonparametric Methods	
<i>Measurement and Cognitive Psychology</i>		
PSYC 4813	Psychological Testing	
EPSY 5663	Creativity for Teachers	
EPSY 6533	Human Motivation	
EPSY 6163	Emotion and Cognition	
PSYC 5823	Cognitive Processes	
Hours Subtotal		9
Qualifying Exams		
Students must pass a written and oral comprehensive exam. Passing the exams qualifies students for Admission to Doctoral Candidacy, and they should move to the dissertation proposal phase.		
Dissertation Hours		
REMS 6000	Doctoral Dissertation	15
Hours Subtotal		15
Applied Experience		
Each student will select two suggested experiences.		
Total Hours		66

¹ REMS 5013 and REMS 5953 are required prerequisites.

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Electrical Engineering, PhD

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 73 (beyond the Bachelor's Degree)

Code	Title	Hours
Lecture Courses		
Select 33 hours that may include up to 6 credit hours of ECEN 5070 or equivalent with approval of the student's graduate advisory committee.		33
Preliminary PhD Research and Proposal		
ECEN 6050	Preliminary PhD Research and Proposal	3
PhD Seminar Series		
ECEN 6001	PhD Seminar Series	1
Dissertation Research		
ECEN 6000	Dissertation	30
Additional Courses		
May include additional lecture courses, Master's thesis (ECEN 5000 or equivalent), and/or dissertation research hours as approved by the student's graduate advisory committee.		6
Total Hours		73

Note: ENGL 4893 CANNOT be used toward the degree.

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

English, PhD

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 60

Code	Title	Hours
Required Courses		
Core and Dissertation hours to total 60 hours.		60
Select 35-40 hours of coursework, per plan of study approved by advisor		
Dissertation		
ENGL 6000	Doctoral Dissertation	
Total Hours		60

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Entomology, PhD

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 60 (Beyond the Master's Degree)

Code	Title	Hours
Required Courses		
ENTO 5464	Insect Biology and Classification	4
ENTO 5003	Insect Biochemistry	3
ENTO 5044	Insect Morphology and Physiology	4
ENTO 5870	Scientific Presentations ¹	
Recommended Courses		
ENTO 5992	Career Skills and Professionalism for Scientists	
ENTO 5524	Integrated Management of Insect Pests and Pathogens	
ENTO 5623	Advanced Biotechnology Methods	
Plus additional approved courses to complete the graduate program Plan of Study		49
Total Hours		60

¹ Only required for students who didn't take this course as part of an OSU Master's program.

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Environmental Science, PhD

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 60

Code	Title	Hours
Required Courses		
<i>Core Courses</i>		
ENVR 5123	Environmental Problem Analysis	3
ENVR 5303	Issues in Environmental Sustainability	3
Select 3 approved hours of Natural or Physical Science courses.		3
Select 6 approved hours of skills courses.		6
Hours Subtotal		15
Electives		
Select 21-30 approved elective hours.		
Dissertation		
ENVR 6000	Doctoral Research for Dissertation (15-24 hours)	
Electives and Dissertation Combined 45 Hours		45
Total Hours		60

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Fire and Emergency Management Administration, PhD

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 60

Code	Title	Hours
Core Courses		
FEMP 5113	Introduction to Fire Administration	3
FEMP 5123	Introduction to Emergency Management	3
FEMP 6103	Proseminar in Fire and Emergency Management	3
FEMP 6323	Organizational Behavior in Disasters	3
FEMP 6413	Seminar Risk Theory and Management	3
Hours Subtotal		15
Methods/Research		
FEMP 5013	Research Design & Methodology	3
FEMP 5023	Quantitative Methods for Fire and Emergency Management I	3
FEMP 6013	Qualitative Methods for Fire and Emergency Management	3
FEMP 6023	Quantitative Methods for Fire and Emergency Management II	3
Hours Subtotal		12
Electives		
Select 18 hours from the following: ¹		18
FEMP 5653	Hazard, Vulnerability, and Risk Analysis	
FEMP 5413	Financial Administration for Fire and Emergency Management	
FEMP 5423	Labor Management for Fire and Emergency Management	
FEMP 5213	Disaster Response	
FEMP 5223	Preparedness and Planning	
FEMP 5233	Disaster Recovery	
FEMP 5243	Mitigation	
FEMP 5313	Political and Community Relations for Fire and Emergency Management Administration	
FEMP 5323	Leadership and Management for Fire and Emergency Management	
FEMP 5333	Incident Command System	
FEMP 5613	Complex Emergencies	
FEMP 5623	Emergency Management in the International Setting	
FEMP 5633	Emergency Management and Public Policy in the United States	
FEMP 5643	Politics of Disaster	
FEMP 5810	Special Topics Seminar in Fire and Emergency Management	
FEMP 5820	Special Topics Seminar in Emergency Management	

FEMP 5830	Special Topics Seminar in Fire Administration	
FEMP 6303	Populations at Risk	
FEMP 6313	Comparative and International Dimensions of Emergency Management	
FEMP 6840	Directed Readings in Fire and Emergency Management	
FEMP 6820	Advanced Special Topics Seminar in Emergency Management	
FEMP 6810	Advanced Special Topics Seminar in Fire Administration	
POLS 5673	Understanding and Responding to Terrorism	
Hours Subtotal		18
Dissertation Hours		
FEMP 6000	Dissertation	15
Hours Subtotal		15
Total Hours		60

¹ These 6 courses should be chosen in consultation with your advisor.

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Food Science, PhD

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 60 (Beyond the Master's Degree)

Code	Title	Hours
Degree Core		
FDSC 4153	Advanced Food Microbiology	3
FDSC 4763	Analysis of Food Products	3
FDSC 5300	Food Science Seminar	1
FDSC 5373	Advanced Food Chemistry	3
FDSC 6000	Doctoral Research and Dissertation	30
STAT 5013	Statistics for Experimenters I	3
Hours Subtotal		43
Electives		
Select 16 hours from the following:		16
FDSC 4123	Principles of Food Engineering	
FDSC 4243	Researching Consumer Food Preferences	
FDSC 4253	Pre-Harvest Food Safety	
FDSC 4333	Processed Meat	
FDSC 5102	Ethics and Professionalism in Animal and Food Science	
FDSC 5113	Internal Audit and Advanced HACCP	
FDSC 5120	Special Topics in Food Science	
FDSC 5143	Food Safety Modernization Act	
FDSC 5213	Advances in Meat Science	
FDSC 5233	Food Safety Audit Schemes	
FDSC 5333	Carcass Value Estimation Systems	
FDSC 5393	Issues in Food Science	
FDSC 5553	Interpreting Animal and Food Science Research	
Hours Subtotal		16
Other Requirements		
FDSC 5300	Food Science Seminar	1
Hours Subtotal		1
Total Hours		60

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Forensic Sciences, PhD

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 60

Code	Title	Hours
Degree Core		
FRNS 5743	Forensic Science Seminar	3
FRNS 6083	Advanced Forensic Statistics	3
FRNS 6723	Research Design and Methods	3
Per faculty advisor's recommendation, six hours of directed electives.		6
Hours Subtotal		15
Dissertation [†]		
FRNS 6000	Doctoral Dissertation	15-45
Hours Subtotal		15-45
Electives [†]		
0-30		
FRNS 5013	Survey of Forensic Sciences	
FRNS 5023	Questioned Document Examination	
FRNS 5033	Theory and Practice of Forensic Handwriting Examination	
FRNS 5043	Technical Aspects of Forensic Document Examination	
FRNS 5053	The Historical Aspects of Forensic Document Examination	
FRNS 5063	Ethical Research and Scientific Writing	
FRNS 5073	Quality Assurance in Forensic Science	
FRNS 5083	Ethics in Forensic Leadership	
FRNS 5090	Internship in Forensic Sciences	
FRNS 5093	Scientific Writing and Presentation Skills	
FRNS 5103	The Chemistry of Pyrotechnics	
FRNS 5113	Essential Science for Explosive Operators	
FRNS 5123	Fire Dynamics in Forensic Investigations	
FRNS 5133	Ordnance Identification and Recognition	
FRNS 5143	Methods in Fire and Explosion Investigation NFPA 921/1033	
FRNS 5153	Explosives Research, Testing and Evaluation Methods	
FRNS 5183	Computer Fire Modeling	
FRNS 5213	Molecular Biology for the Forensic Scientist	
FRNS 5242	Population Genetics for the Forensic Scientist	
FRNS 5282	Methods in Forensic Sciences	
FRNS 5323	Forensic Microbiology	
FRNS 5413	Forensic Pathology and Medicine	
FRNS 5422	Forensic Osteology and Anthropology	
FRNS 5423	Blast Injuries and Effects	
FRNS 5443	Interdisciplinary Post Blast Investigation	
FRNS 5513	Forensic Bioscience	
FRNS 5523	Forensic Toxicology	
FRNS 5533	Drug Toxicity	

FRNS 5543	Advanced Forensic Toxicology
FRNS 5613	Criminalistics and Evidence Analysis
FRNS 5622	Crime Scene Laboratory and Moot Court Experience
FRNS 5653	The Law and Expert Evidence
FRNS 5663	Destructive Devices/Explosives: Law and Regulations
FRNS 5673	Intelligence for Forensic Investigators
FRNS 5683	Digital and Multimedia Evidence for Investigators
FRNS 5713	Forensic Psychology
FRNS 5723	Advanced Forensic Psychology
FRNS 5733	Forensic Victimology
FRNS 5753	Criminal Profiling
FRNS 5803	Circuit Exploitation of Destructive Devices
FRNS 5813	Building Construction and Fire/Explosion Forensic Examination
FRNS 5823	Forensic Examination of Fire Protection Systems
FRNS 5833	Identification of Destructive Device Fuzing Systems
FRNS 5853	Electrical Theory and Failure Analysis in Forensic Fire Investigations
FRNS 5873	Firearms and Toolmarks
FRNS 5913	Forensic Accounting and Fraud Investigation
FRNS 5943	Forensic Management and Organizational Development
FRNS 5960	Forensic Problem Solving through Applied Research
FRNS 5963	Forensic Statistics
FRNS 5970	Directed Readings in Forensic Sciences
FRNS 5990	Special Topics in Forensic Sciences
FRNS 6083	Advanced Forensic Statistics
FRNS 6123	Advanced Fire Dynamics
FRNS 6173	Advanced Interdisciplinary Post Blast Investigation
FRNS 6183	Advanced Computer Fire Modeling
FRNS 6243	Historical Evolution of Forensic Genetics
FRNS 6423	Advanced Blast Injuries and Effects
FRNS 6513	Advanced Methods in Forensic Genetics
FRNS 6713	Applied Forensic Theory
FRNS 6723	Research Design and Methods
FRNS 6733	Juvenile Issues in Forensic Sciences
FRNS 6800	Critical Readings in Forensic Sciences
FRNS 6843	Advanced Destructive Device Circuit Exploitation
FRNS 6853	Advanced Electrical Theory and Failure Analysis in Forensic Fire Investigations
FRNS 6903	Advanced Forensic Examination of Firearms
FRNS 6923	RCIED - Advanced Analysis and Mitigation
FRNS 6990	Advanced Special Topics in Forensic Sciences

Hours Subtotal	0-30
Total Hours	60

¹ Elective hours based on hours needed to supplement less
Dissertation hours.

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Geography, PhD

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 60 (Beyond the Master's Degree)

Code	Title	Hours
Required Geography Core ¹		
GEOG 5001	Professional Development in Geography	1
GEOG 5303	Geographic Analysis I	3
GEOG 5413	History and Philosophy of Geography	3
GEOG 5403	Current Geographic Research	3
GEOG 6313	Mixed Methods in Field Research	3
Hours Subtotal		13
Elective Coursework inside Geography		
Select 15-27 hours focused in cultural/historical geography, natural resource management, and geospatial technologies.		
Elective Coursework outside Geography		
Select 9-15 hours of courses that complement the student's research track and align with the chosen specialty		
Dissertation (required minimum 15 hours) ¹		
GEOG 6000	Doctoral Dissertation Research	
Hours Subtotal		47
Total Hours		60

¹ Combined coursework and dissertation hours to total 60 hours.

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Geology, PhD

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 60 (Beyond the Master's Degree)

Code	Title	Hours
Required Courses		
GEOL 5300	Geology Colloquium	2
GEOL 5243	Research Methods and Techniques in Geosciences	3
Hours Subtotal		5
Additional coursework in GEOL		
Select 15 hours ¹		15
Hours Subtotal		15
Research and Dissertation		
Select 40 hours ²		40
Hours Subtotal		40
Total Hours		60

¹ Up to 12 hours of coursework may be taken outside of GEOL.

² At the discretion of the advisory committee, up to 20 hours of dissertation hours may be replaced by additional course hours.

Total Hours: 90 (Beyond the Bachelor's Degree)

Code	Title	Hours
Required Courses		
GEOL 5300	Geology Colloquium	2
GEOL 5243	Research Methods and Techniques in Geosciences	3
Hours Subtotal		5
Additional coursework in GEOL		
Select 35 hours ¹		35
Hours Subtotal		35
Research and Dissertation		
Select 50 hours ²		50
Hours Subtotal		50
Total Hours		90

¹ Up to 12 hours of coursework may be taken outside of GEOL.

² At the discretion of the advisory committee, up to 20 hours of dissertation hours may be replaced by additional course hours.

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Health, Leisure and Human Performance: Health and Human Performance, PhD

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 60 (Beyond the Master's Degree)

Code	Title	Hours
Common Core		
<i>3 hours Development of Curricula</i>		
LEIS 6010	Independent Study in Leisure Studies	3
<i>3 hours Organization/Leadership</i>		
LEIS 6763	Management in Health, Leisure, and Human Performance Settings	3
<i>3 hours Professional Ethics</i>		
Professional Ethics course, per advisor approval		3
Hours Subtotal		9
Research Design and Statistics (Inquiry)		
Select 9 hours from the following:		9
REMS 6003	Analyses of Variance	
REMS 6013	Multiple Regression Analysis in Behavioral Studies	
REMS 6663	Applied Multivariate Research in Behavioral Studies	
STAT 5033	Nonparametric Methods	
STAT 5043	Sample Survey Designs	
SCFD 6123	Qualitative Research I	
SCFD 6190	Qualitative Research: Selected Methods	
SCFD 6193	Qualitative Research II	
Hours Subtotal		9
Option Hours		
Select 27 approved hours		27
Hours Subtotal		27
Dissertation		
Select 15 hours		15
Hours Subtotal		15
Total Hours		60

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Health, Leisure and Human Performance: Leisure Studies, PhD

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 60

Code	Title	Hours
Required Coursework		
LEIS 6013	Professional Issues in Leisure Studies	3
LEIS 6453	Leisure Behavior	3
Select 6 hours that may include the following:		6
REMS 6003	Analyses of Variance	
REMS 6013	Multiple Regression Analysis in Behavioral Studies	
REMS 6663	Applied Multivariate Research in Behavioral Studies	
STAT 5033	Nonparametric Methods	
STAT 5043	Sample Survey Designs	
SCFD 6113	Theoretical Foundations of Inquiry	
Hours Subtotal		12

Independent Study Opportunities

The doctoral advisory committee and the individual student will work together to select the most appropriate additional coursework for the Plan of Study. Students may wish to work one-on-one with a faculty member, or engage in an independent project in a field-based setting. These types of experiences are generally addressed within the independent study coursework, which allow flexibility in credit hours and academic assignments. These courses are generally established as contracts with a specific faculty member.

LEIS 5020	Workshop in Recreation Management	
LEIS 5030	Field Problems in Recreation Management	
LEIS 6010	Independent Study in Leisure Studies	
LEIS 6020	Leisure Research Colloquium	

Common Core

HHP 6723	Curriculum Development in Health, Leisure and Human Performance	3
LEIS 6763	Management in Health, Leisure, and Human Performance Settings	3
LEIS 6043	Ethical Issues in Health, Leisure, and Human Performance	3

Hours Subtotal **9**

Dissertation

LEIS 6000	Doctoral Dissertation	15
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Hours Subtotal **15**

Electives¹

Select 24 hours that may include the following: 24

ENGL 0003	Academic English for Graduate Students	
ENGL 5693	Research Writing for International Graduate Students	
HHP 5073	Psychological Aspects of Sport	

Recreational Therapy

LEIS 5073	Recreational Therapy and Geriatrics	
LEIS 5483	Recreational Therapy for Persons with Physical Disabilities	
LEIS 5493	Recreational Therapy in Mental Health and Intellectual Disabilities	
CPSY 5173	Gerontological Counseling	
CPSY 5223		
EPSY 5403	Issues in Adolescent Development	
EPSY 6043	Adult Development	
EPSY 6163	Emotion and Cognition	
HHP 5883		
HDFS 5283	Developmental Disabilities	
HDFS 5403	Perspectives in Gerontology	
HDFS 5411	Ethics and Aging	
<i>Natural Resource Recreation Management</i>		
LEIS 5403	Outdoor Recreation	
LEIS 6023	Special Topics In Recreation	
GEOL 5100	Problems in Hydrogeology	
POLS 5620	Seminar in Natural Resource Policy, Law and Administration	
ZOOL 5153		
ENVR 5303	Issues in Environmental Sustainability	
NREM 4053	Natural Resource Recreation	
GEOG 5150	Geography of Sport, Recreation and Leisure Seminar	
GEOG 5163	Resource Management in the National Parks	
<i>Tourism and Hospitality</i>		
GEOG 4143	Geography of Travel and Tourism	
HTM 5213	Hospitality and Tourism Management	
HTM 5233	Convention and Special Event Management	
HTM 5513	Hospitality Strategic Management	
HTM 6113	Hospitality and Tourism Education	
HTM 6313	Tourism Policy and Planning	
HTM 6413		
<i>Higher Education</i>		
EDLE 5973		
EDLE 6233		
EDLE 6463		
EDLE 6583		
EDLE 6713		
EDLE 6753		
EDLE 6813		
EDLE 6843		
CIED 5243		
CIED 5623	Multicultural and Diversity Issues in Curriculum	
CIED 6033	Analysis of Teaching	
EPSY 5463	Psychology of Learning	
EPSY 5663	Creativity for Teachers	
EPSY 6533	Human Motivation	
EDTC 5153	Computer-Based Instruction Development	
SCFD 5873	Culture, Society and Education	

HRAE 5213

HRAE 5253

HRAE 5703

Research and Statistics

SOC 5213 Techniques of Population Analysis

SOC 5273 Qualitative Research Methods

SCFD 5913 Introduction to Qualitative Inquiry

SCFD 6123 Qualitative Research I

SCFD 6190 Qualitative Research: Selected Methods

SCFD 6193 Qualitative Research II

STAT 5053 Time Series Analysis

STAT 5063 Statistical Machine Learning with R

STAT 5123 Probability Theory

STAT 5223 Statistical Inference

STAT 5323 Theory of Linear Models I

STAT 5333 Theory of Linear Models II

STAT 5513 Multivariate Analysis

Management, Business and Entrepreneurship

EEE 5113 Entrepreneurship and Venture Management

BCOM 5113 Seminar in Administrative Communication

MGMT 5113 Individual and Organizational Behavior

MGMT 5213 Seminar in Organizational Behavior

MGMT 5533 Leadership Challenges

MGMT 6313 Advanced Organizational Behavior

MKTG 5613 Seminar in Consumer Behavior

MBA 5261 Legal Issues in Business

POLS 5313 Public Management

POLS 5323 Urban Politics and Management

POLS 5333 Seminar in Public Personnel Administration

SOC 5663 American Pluralism, Race and Ethnicity in American Life

SOC 5763 Contemporary Organizational Theory

SOC 5813 Myths and Realities of Organizational Change

Counseling and Human Development

EPSY 5103 Human Development in Psychology

CPSY 5553 Theories of Counseling

EPSY 5403 Issues in Adolescent Development

EPSY 6043 Adult Development

CPSY 5583 Group Process

CPSY 5473 Basic Counseling Skills

PSYC 6353 Psychology of Motivation

PSYC 6563 Advanced Social Psychology

HDFS 5213 Lifespan Development

HDFS 5413 Aging in Human Development

HDFS 5253 Theory and Research: Social and Emotional Development

Hours Subtotal 24**Total Hours 60**

¹ Depending on one's interests, the following courses and programs may be suitable for doctoral study. The list of courses is for illustration only - with permission of the advisory committee, a doctoral student may take coursework such as those below.

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

History, PhD

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 60

Code	Title	Hours
Required Courses		
HIST 6023	Historiography	3
HIST 5021	Teaching History at the College Level	1
Hours Subtotal		4
Seminar		
Select 36 approved hours, including 3 hours of research seminar.		36
Suggested Courses		
HIST 6100	Directed Readings in History ¹	
HIST 6130	Graduate Studies in History ¹	
Hours Subtotal		36
Thesis		
15 hours of Thesis		15
Hours Subtotal		15
Additional Courses		
Approved courses needed to complete degree requirements.		5
Hours Subtotal		5
Total Hours		60

¹ Students may include no more than six hours in HIST 6100 and six hours in HIST 6130 courses.

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Human Development and Family Science, PhD

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Overall Grade-Point-Average: 3.0 cumulative GPA

Total Hours: 72

Code	Title	Hours
Core Courses		
<i>Human Developmental Science and Family Science</i>		
HDFS 5213	Lifespan Development	3
HDFS 5523	Family Theory	3
<i>Thesis Equivalence</i>		
HDFS 5110	Directed Study in HDFS ¹	6
Core Research Methods and Statistics Courses		
<i>Research Methods</i>		
HDFS 5123	Research Methods and Design in HDFS I	3
HDFS 6133	Advanced Research Methods in Human Development and Family Science	3
<i>Statistics/Analytic</i>		
9 hours		9
PSYC 5304	Quantitative Methods in Psychology I (or equivalent)	
PSYC 5314	Quantitative Methods in Psychology II (or equivalent)	
HDFS 6143	Structural Equation Modeling for HDFS Applications	
<i>Specialization Courses</i>		
30 hours of Committee Designed Courses (to fit student's area of interest)		30
<i>Dissertation Research</i>		
HDFS 6000	Doctoral Dissertation	15
Total Hours		72

¹ 6 hours 1st Year Research Project - can be waived if applicant has M.S. Thesis)

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Human Sciences: Human Development and Family Science, PhD

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 60 (Beyond the Master's Degree)

Code	Title	Hours
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- Prerequisites: 3 hours of master's level research methods and 3 hours of master's level statistics, MS thesis or equivalent

Human Development and Family Science

HDFS 5213	Lifespan Development	3
HDFS 5523	Family Theory	3
HDFS 6113	Professional Development in HDFS	3
HDFS 6123	Risk and Resilience in Human Development and Family Science	3

Electives

Select 9 hours, at least 3 from outside of HDFS recommended) from the courses below:

HDFS 5513	Issues in Family Science	
HDFS 6283	Seminar in Human Development	
HDFS 6583	Seminar in Family Science	
Other courses in HDFS or related areas, subjective to committee approval		

Specializations

Select one of the following specializations: 3

Human Development Specialization		
HDFS 5253	Theory and Research: Social and Emotional Development	
Family Science Specialization		
HDFS 6523	Advanced Theory in Human Development and Family Science	

Research Methods and Statistics

HDFS Methods

HDFS 6133	Advanced Research Methods in Human Development and Family Science	3
HDFS 6190	Research Internship	6

Select two courses from one of the following sequences (6-8 hours):¹

Sequence 1 (2 of the following)		
STAT 5023	Statistics for Experimenters II	
STAT 5063	Statistical Machine Learning with R	
STAT 5303	Experimental Designs	

Sequence 2

REMS 6003	Analyses of Variance	
REMS 6013	Multiple Regression Analysis in Behavioral Studies	

Sequence 3¹

PSYC 5304	Quantitative Methods in Psychology I ¹	
PSYC 5314	Quantitative Methods in Psychology II ¹	

Tracks		
Take two 3-hour courses in advanced statistics or qualitative/quantitative research methods (6 semester-hour minimum)		6
Qualitative Track		
HDFS 6143	Structural Equation Modeling for HDFS Applications	
HDFS 6153	Multilevel Modeling for HDFS Applications	
REMS 6663	Applied Multivariate Research in Behavioral Studies	
REMS 6373	Program Evaluation	
Qualitative Track		
SCFD 6113	Theoretical Foundations of Inquiry	
SCFD 6123	Qualitative Research I	
SCFD 6193	Qualitative Research II	
SOC 5273	Qualitative Research Methods	
Dissertation (minimum 15 hours)		
HDFS 6000	Doctoral Dissertation	15
Total Hours¹		60

¹ Total hours for degree will be 62 for students choosing Sequence 3.

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Industrial Engineering and Management, PhD

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 60

Code	Title	Hours
Required Courses		
Select 27 hours of courses eligible for graduate plan of study with the approval of the advisory committee.		27
IEM 6000	Doctoral Research and Dissertation	18
Hours Subtotal		45
Electives		
Select 12 hours of IEM graduate courses or research credits with the approval of the advisory committee. ¹		12
Hours Subtotal		12
Dissertation		
IEM 6903	IEM Doctoral Seminar	3
Hours Subtotal		3
Total Hours		60

¹ At least 75 percent of total credit hours must be 5000/6000 level courses.

Additional Industrial Engineering and Management, PhD., Requirements

- Minimum 60 hours required
- At least seventy-five percent of coursework on the Plan of Study must include 5000 and 6000 level courses
- A minimum of 15 hours at the 6000 level with a grade of SR for the doctoral dissertation must be complete. The maximum number of dissertation hours (6000 with a grade of SR) permissible on a Plan of Study must not exceed three-fourths of the total credit hours in the approved graduate degree program
- Credit for all courses on a graduate Plan of Study must have been awarded within 10 years of completion of all degree requirements
- A minimum of 30 in-residence credit hours are required
- Non-Course requirements:
 - Doctoral Candidacy
 - Dissertation Defense
 - Dissertations Submission/Approval

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Integrative Biology, PhD

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 60 (Beyond the Master's Degree)

Code	Title	Hours
Seminar		
	Select three hours of approved seminar	3
5000-level or 6000-level courses or seminars		
	Select 25 approved hours to complete the graduate program Plan of Study	25
Dissertation		
	Select 15 approved hours to complete the graduate program Plan of Study	15
Additional Courses		
	Select a minimum of 17 approved additional hours to complete degree requirements.	17
Total Hours		60

Integrative Biology, PhD Requirements

- Comprehensive Exam

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Materials Science and Engineering, PhD

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 72 (Group I - Beyond the Bachelor's Degree)

Code	Title	Hours
Required Courses		
MSE 5013	Advanced Thermodynamics of Materials	3
MSE 5023	Diffusion and Kinetics	3
MSE 5043	Advanced Materials Characterization	3
MSE 6010	Materials Science and Engineering Seminar for PhD Students	0
Hours Subtotal		9
Electives		
Student must complete 27 hours of MSE or other approved 5000- and 6000-level courses offered at OSU from preselected list of MSE, CHE, ECEN, or MAE courses, or additional courses in engineering or science per committee approval.		27
Hours Subtotal		27
Dissertation		
MSE 6000	Doctoral Dissertation	36
Hours Subtotal		36
Total Hours		72

Total Hours: 60 (Group II - Beyond the Master's Degree from Outside OSU)

Code	Title	Hours
Required Courses		
Select from the following:		9
MSE 5013	Advanced Thermodynamics of Materials	
MSE 5023	Diffusion and Kinetics	
MSE 5043	Advanced Materials Characterization	
MSE 6010	Materials Science and Engineering Seminar for PhD Students	
Hours Subtotal		9
Electives		
Select 21 hours of elective MSE or other approved 5000- and 6000-level courses offered at OSU.		21
<i>From pre-selected list of MSE, CHE, ECEN, or MAE courses, or additional courses in engineering or science per committee approval.</i>		
Hours Subtotal		21
Dissertation		
MSE 6000	Doctoral Dissertation	30
Total Hours		60

Total Hours: 60 (Group III - Beyond the Master's Degree from OSU)

Code	Title	Hours
Required Courses		
Group III student must meet the Required Course requirements of MSE 5000- and 6000-level courses offered at OSU. The student in this Group III should have already completed the three required courses for the PhD program during his/her MS degree in Materials Science and Engineering at OSU. If any of the remaining Required Courses were taken as an Elective by the student during his/her MS degree, they will not be required to take them again. However, if the student had not completed any of the remaining Required Courses during his/her MS degree in Materials Science and Engineering at OSU, the student must take them to complete the Required Course requirements for PhD degree in MSE at OSU.		
Select from the following:		9
MSE 5013	Advanced Thermodynamics of Materials	
MSE 5023	Diffusion and Kinetics	
MSE 5043	Advanced Materials Characterization	
MSE 6010	Materials Science and Engineering Seminar for PhD Students	
Electives		
Group III student must complete a minimum of 15 hours and a maximum of 30 hours of required and elective coursework for his/her PhD degree in MSE at OSU. This includes the hours for any Required Courses taken after enrollment in the MSE PhD program at OSU. Elective Courses taken by the student at OSU which were used toward fulfilling his/her MS degree requirements in MSE at OSU, will not be considered toward his/her PhD degree in MSE. The student will be allowed to use a maximum of 15 hours of coursework toward his/her PhD degree in MSE at OSU, i.e., the hours for core courses for the MS degree program.		15-30
Dissertation		
MSE 6000	Doctoral Dissertation	30-45
Total Hours		60

Additional Materials Science and Engineering, PhD, Requirements

- Upon approval by the committee, students may choose other appropriate elective courses from engineering, physics and chemistry departments.
- Requirement for taking the "Required" courses for Group III Ph.D. students will be waived if they have taken that course while doing their M.S. degree at OSU. The same course however, cannot be counted towards fulfilling the credit hour requirements for two degrees (M.S. and Ph.D.) at OSU. The student will be required to fulfill the remaining coursework credit hour requirement for the Ph.D. degree by taking "Elective" courses.
- Students entering the Ph.D. program without an undergraduate/graduate degree in Materials Science and Engineering or related degree will be required to complete the ENSC 3313 Materials Science (undergraduate course) with an "A" grade or better in their first year at OSU. This will not be counted towards their degree requirements.

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General

Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Mathematics, PhD

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 60 (Beyond the Master's Degree)

Code	Title	Hours
Core Courses		
Select 15 hours from one of the following tracks:		15
<i>Applied</i>		
MATH 5023	Advanced Linear Algebra	
MATH 5143	Real Analysis I	
MATH 5283	Complex Analysis I	
MATH 5543	Numerical Analysis for Differential Equations	
MATH 5233	Partial Differential Equations	
<i>Pure</i>		
MATH 5023	Advanced Linear Algebra	
MATH 5143	Real Analysis I	
MATH 5283	Complex Analysis I	
MATH 5613	Algebra I	
MATH 5313	Geometric Topology	
<i>Mathematics Education</i>		
MATH 5023	Advanced Linear Algebra	
Select 9 hours from the following:		
MATH 5143	Real Analysis I	
MATH 5283	Complex Analysis I	
MATH 5613	Algebra I	
MATH 5313	Geometric Topology	
MATH 5543	Numerical Analysis for Differential Equations	
MATH 5233	Partial Differential Equations	
Select one of the following:		
STAT 5023	Statistics for Experimenters II	
STAT 5063	Statistical Machine Learning with R	
Hours Subtotal		15
Additional Math Courses		
Select 12 hours from track used for core courses.		12
<i>Applied</i>		
In addition to the core course requirements, every plan of study must contain at least 12 hours of graduate courses in the mathematical sciences (mathematics, statistics, or computer science).		
<i>Pure</i>		
In addition to the core course requirements, every plan of study must contain at least 12 hours of graduate courses in the mathematical sciences (mathematics, statistics, or computer science).		
<i>Mathematics Education</i>		
MATH 5913	Introduction to Research in Mathematics Education	
MATH 6923	Research in Undergraduate Mathematics Education	

Select 6 hours from the following:

SCFD 6113	Theoretical Foundations of Inquiry	
SCFD 6123	Qualitative Research I	
EPSY 5463	Psychology of Learning	
REMS 5953	Statistical Methods in Education	

Hours Subtotal 12

Preliminary Research Project

MATH 6010	Advanced Seminar in Mathematics (Reading course with advisor)	3
MATH 6090	Doctoral Research Project	3

Hours Subtotal 6

Additional Graduate Courses

Combination of electives and dissertation hours to total 27 hours. 27

Electives

Select 3-12 hours.

Dissertation

Select 15-24 hours.

Hours Subtotal 27

Total Hours 60

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Mechanical and Aerospace Engineering, PhD

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 60 (Beyond the Master's Degree)

Code	Title	Hours
Coursework		
Select 24 hours of 5000- and 6000-level coursework beyond the Master's degree.		24
Research		
MAE 6000	Doctoral Dissertation	29
Technical Elective		
Select 6 approved hours		6
Other Requirements		
MAE 6010	Advanced Study ¹	1
Total Hours		60

¹ To be taken the same semester as the Preliminary Examination in order to be assigned a letter grade.

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Mechanical and Aerospace Engineering: Unmanned Aerial Systems, PhD

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 60

Code	Title	Hours
UAS Core Courses		
Select 12 hours from the following:		12
MAE 5083	Engineering Acoustics	
MAE 5233	Advanced Fluid Dynamics I	
MAE 5343	Advanced Aero Propulsion and Power	
MAE 5913	Advanced Aerodynamics	
MAE 5923	Guidance and Control of Aerospace Vehicles	
MAE 5943	Unsteady Aerodynamics and Aeroacoustics	
MAE 5963	Unmanned Aerial Systems Design and Analysis	
MAE 5973	Unmanned Aerial Systems Propulsion	
MAE 5983	Aircraft Certification and Test	
MAE 6313	Atmospheric Flight Control	
Hours Subtotal		12
MAE Electives ¹		
Select 9 hours minimum (Any MAE graduate-level course supporting UAS research will be allowed with permission of the student's faculty advisory committee): ¹		9-15
Technical Electives		
Select 9 hours (Any graduate-level course will be allowed with permission of the student's faculty advisory committee):		9
Hours Subtotal		18-24
Dissertation ¹		
MAE 6000	Doctoral Dissertation ¹	24-30
Hours Subtotal		24-30
Total Hours		60

¹ Total hours for dissertation will depend on number of electives taken.

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Microbiology, Cell and Molecular Biology, PhD

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 60 (Beyond the Master's Degree)

Code	Title	Hours
Required Coursework		
Select 11 hours of Microbiology (MICR) 5000- or 6000-level courses (non-zero ending).		11
Select 6 hours of any 5000- or 6000-level courses (non-zero ending)		6
MICR 6120	Recent Advances in Microbiology	2
MICR 5160	Seminar	1
Dissertation		
MICR 6000	Dissertation	40
Hours Subtotal		60

Total Hours: 90 (Beyond the Bachelor's Degree)

Code	Title	Hours
Required Coursework		
Select 14 hours of Microbiology (MICR) 5000- or 6000-level courses (non-zero ending).		14
Select 25 hours of any 5000- or 6000-level courses (non-zero ending)		25
MICR 6120	Recent Advances in Microbiology	4
MICR 5160	Seminar	2
Dissertation		
MICR 6000	Dissertation	45
Hours Subtotal		90

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Natural Resource Ecology and Management, PhD

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 60 (Beyond the Master's Degree)

Code	Title	Hours
Required Courses		
Select a minimum of 45 hours of approved 5000- or 6000-level or other courses approved for graduate credit courses and one hour of NREM 5020. ¹		45
Hours Subtotal		45
Dissertation		
NREM 6000	Doctoral Dissertation (Maximum of 45 hours.)	15
Hours Subtotal		15
Total Hours		60

¹ Combined courses plus dissertation must be between 60-66 total hours. Hours could reach a maximum of 66 total hours depending on the courses selected.

Total Hours: 90 (Beyond the Bachelor's Degree)

Code	Title	Hours
Required Courses		
Select a minimum of 66 hours of approved 5000- or 6000-level or other courses approved for graduate credit and one hour of NREM 5020. ²		66
Hours Subtotal		66
Dissertation		
NREM 6000	Doctoral Dissertation (Maximum of 48 hours.)	24
Hours Subtotal		24
Total Hours		90

² Combined courses plus dissertation must be 90 total hours.

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Natural Resource Ecology and Management: Fisheries and Aquatic Ecology, PhD

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 60 (Beyond the Master's Degree)

Code	Title	Hours
Required Courses		
Select a minimum of 45 hours of approved 5000- or 6000-level or other courses approved for graduate credit courses and one hour of NREM 5020. ¹		45
Hours Subtotal		45
Dissertation		
NREM 6000	Doctoral Dissertation (Maximum of 45 hours.)	15
Hours Subtotal		15
Total Hours		60

¹ Combined courses plus dissertation must be between 60-66 total hours. Hours could reach a maximum of 66 total hours depending on the courses selected.

Total Hours: 90 (Beyond the Bachelor's Degree)

Code	Title	Hours
Required Courses		
Select a minimum of 66 hours of approved 5000- or 6000-level or other courses approved for graduate credit and one hour of NREM 5020. ²		66
Hours Subtotal		66
Dissertation		
NREM 6000	Doctoral Dissertation (Maximum of 48 hours.)	24
Hours Subtotal		24
Total Hours		90

² Combined courses plus dissertation must be 90 total hours.

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Natural Resource Ecology and Management: Forest Resources, PhD

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 60 (Beyond the Master's Degree)

Code	Title	Hours
Required Courses		
Select a minimum of 45 hours of approved 5000- or 6000-level or other courses approved for graduate credit courses and one hour of NREM 5020. ¹		45
Hours Subtotal		45
Dissertation		
NREM 6000	Doctoral Dissertation (Maximum of 45 hours.)	15
Hours Subtotal		15
Total Hours		60

¹ Combined courses plus dissertation must be between 60-66 total hours. Hours could reach a maximum of 66 total hours depending on the courses selected.

Total Hours: 90 (Beyond the Bachelor's Degree)

Code	Title	Hours
Required Courses		
Select a minimum of 66 hours of approved 5000- or 6000-level or other courses approved for graduate credit and one hour of NREM 5020. ²		66
Hours Subtotal		66
Dissertation		
NREM 6000	Doctoral Dissertation (Maximum of 48 hours.)	24
Hours Subtotal		24
Total Hours		90

² Combined courses plus dissertation must be 90 total hours.

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Natural Resource Ecology and Management: Rangeland Ecology and Management, PhD

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 60 (Beyond the Master's Degree)

Code	Title	Hours
Required Courses		
Select a minimum of 45 hours of approved 5000- or 6000-level or other courses approved for graduate credit courses and one hour of NREM 5020. ¹		45
Hours Subtotal		45
Dissertation		
NREM 6000	Doctoral Dissertation (Maximum of 45 hours.)	15
Hours Subtotal		15
Total Hours		60

¹ Combined courses plus dissertation must be between 60-66 total hours. Hours could reach a maximum of 66 total hours depending on the courses selected.

Total Hours: 90 (Beyond the Bachelor's Degree)

Code	Title	Hours
Required Courses		
Select a minimum of 66 hours of approved 5000- or 6000-level or other courses approved for graduate credit and one hour of NREM 5020. ²		66
Hours Subtotal		66
Dissertation		
NREM 6000	Doctoral Dissertation (Maximum of 48 hours.)	24
Hours Subtotal		24
Total Hours		90

² Combined courses plus dissertation must be 90 total hours.

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Natural Resource Ecology and Management: Wildlife Ecology and Management, PhD

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 60 (Beyond the Master's Degree)

Code	Title	Hours
Required Courses		
Select a minimum of 45 hours of approved 5000- or 6000-level or other courses approved for graduate credit courses and one hour of NREM 5020. ¹		45
Hours Subtotal		45
Dissertation		
NREM 6000	Doctoral Dissertation (Maximum of 45 hours.)	15
Hours Subtotal		15
Total Hours		60

¹ Combined courses plus dissertation must be between 60-66 total hours. Hours could reach a maximum of 66 total hours depending on the courses selected.

Total Hours: 90 (Beyond the Bachelor's Degree)

Code	Title	Hours
Required Courses		
Select a minimum of 66 hours of approved 5000- or 6000-level or other courses approved for graduate credit and one hour of NREM 5020. ²		66
Hours Subtotal		66
Dissertation		
NREM 6000	Doctoral Dissertation (Maximum of 48 hours.)	24
Hours Subtotal		24
Total Hours		90

² Combined courses plus dissertation must be 90 total hours.

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Nutritional Sciences, PhD

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 60 (Beyond the Master's Degree)

Code	Title	Hours
Degree Program Requirements		
<i>Nutritional Sciences</i>		
Required Core Courses		18-30
NSCI 5033	Macronutrients in Human Nutrition	
NSCI 5043	Micronutrients in Human Nutrition	
NSCI 6960	Seminar: Emerging Topics in Nutrition	
Select one of the following:		
NSCI 6451	Advanced Grant Writing in Nutritional Sciences	
NSCI 5103	Grant Writing for the Professional	
GRAD 5890	Special Topics in Grantsmanship	
AGED 5203	Grant Seeking	
Or equivalent		
Suggested courses to complete required core: (p. 2872)		
Human Sciences		
Required Core Courses		3
HS 6993	Graduate Seminar in Human Sciences	
<i>Research Support Courses</i>		
Required Core Courses		18-30
Select 3 hours from the following:		
NSCI 6453	Advanced Research Methods in Nutritional Sciences	
NSCI 5123	Research Methods in Nutritional Sciences	
Or equivalent		
Select 3 hours from the following		
STAT 5023	Statistics for Experimenters II	
STAT 5083	Statistics for Biomedical Researchers	
REMS 6003	Analyses of Variance	
Or equivalent		
The remaining 12-24 credits of coursework should consist of courses in intermediate and advanced statistics, advanced research methodology and advanced research methods:		
Select from Electives to complete coursework (courses from this list used for Nutritional Sciences core electives may not be selected): (p. 2872)		
Dissertation		
Required Core Requirement		15-30
NSCI 6000	Doctoral Dissertation	
Total Hours		60

Suggested Courses and/or Electives

Code	Title	Hours
NSCI 5023	Advanced Nutrition in the Pathophysiology of Chronic Disease	3
NSCI 5133	Advanced Nutrition for Exercise and Sport	3

NSCI 5363	Maternal and Child Nutrition	3
NSCI 5373	Childhood Nutrition	3
NSCI 5393	Nutrition and Aging	3
NSCI 5543	Obesity Prevention Across the Lifespan	3
NSCI 5553	Global Nutrition and Food Security	3
NSCI 5563	Nutritional Assessment	3
NSCI 5613	Advanced Nutrition Education and Counseling	3
NSCI 5643	Advanced Medical Nutrition Therapy	3
NSCI 5713	Advanced Community Nutrition	3
NSCI 5743	Advanced Laboratory Techniques in Nutritional Sciences	3
NSCI 5870	Problems in Nutritional Science	1-4
NSCI 6033	Phytochemicals	3
NSCI 6870	Independent Study in Nutritional Sciences	1-3
BIOC 4113	Molecular Biology	3
BIOC 5102	Molecular Genetics	2
BIOC 5824	Biochemical Laboratory Methods	4
BIOC 6763	Nucleic Acids and Protein Synthesis	3
BIOC 6773	Protein Structure and Enzyme Function	3
BIOC 6783	Biomembranes and Bioenergetics	3
BIOL 4215	Mammalian Physiology	5
BIOL 5283	Endocrinology	3
CPSY 5173	Gerontological Counseling	3
CPSY 5473	Basic Counseling Skills	3
CPSY 5503	Multicultural Counseling	3
HDFS 5413	Aging in Human Development	3
HDFS 5423	Research Perspectives in Gerontology	3
HDFS 5433	Theories of Aging	3
HHP 5593		
HHP 5613		
HHP 5853	Clin Ex Test & Prescript	3
HHP 5873	Human Bioenergetics	3
HLTH 5113	Psychological Aspects of Health	3
HLTH 5323	General Epidemiology	3
HLTH 5453	Cultural Issues In Health	3
MGMT 5113	Individual and Organizational Behavior	3
REMS 5013	Research Design and Methodology	3
REMS 5963	Computer Applications in Nonparametric Data Analyses	3
REMS 6013	Multiple Regression Analysis in Behavioral Studies	3
REMS 6033	Factor Analysis in Behavioral Research	3
REMS 6373	Program Evaluation	3
REMS 6663	Applied Multivariate Research in Behavioral Studies	3
SCFD 5873	Culture, Society and Education	3
SCFD 5913	Introduction to Qualitative Inquiry	3
SCFD 6123	Qualitative Research I	3
SCFD 6193	Qualitative Research II	3
SOC 5213	Techniques of Population Analysis	3
SOC 5273	Qualitative Research Methods	3
SOC 5333	Global Population and Social Problems	3

STAT 4043	Applied Regression Analysis	3
STAT 5033	Nonparametric Methods	3
STAT 5043	Sample Survey Designs	3
STAT 5053	Time Series Analysis	3
STAT 5063	Statistical Machine Learning with R	3
STAT 5073	Categorical Data Analysis	3
STAT 5091	Sas Programming	1
STAT 5303	Experimental Designs	3
VBSC 6120		

Total Hours: 80 (Beyond the Bachelor's Degree)

Code	Title	Hours
	Students accepted into the 80-credit PhD option will first complete all requirements for the MS degree in Nutritional Sciences (Nutrition, thesis option). Students will earn the MS in Nutritional Sciences upon successful completion of the thesis and the first 30 credits.	30
	Students will then complete a minimum of 50 credits beyond the MS degree including:	50
	A minimum of 15 and maximum of 30 credits of dissertation coursework (NSCI 6000)	
	Complete a minimum of 20 hours of coursework including at least one graduate course in NSCI that is not listed below. These 20 hours will include:	
NSCI 6960	Seminar: Emerging Topics in Nutrition	
NSCI 6451	Advanced Grant Writing in Nutritional Sciences (or equivalent)	
HS 6993	Graduate Seminar in Human Sciences	
	Three courses to develop an area of specialization	
	Select one of the following:	
STAT 5023	Statistics for Experimenters II	
STAT 5083	Statistics for Biomedical Researchers	
REMS 6003	Analyses of Variance	
	Or equivalent	
Total Hours		80

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Petroleum Engineering, PhD

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 68

Code	Title	Hours
Degree Program Core:		
PETE 5313	Advanced Drilling Modeling and Simulation	3
PETE 5333	Advanced Production and Flow Assurance	3
PETE 5373	Advanced Well Stimulation	3
PETE 6813	Research Methods in Petroleum Engineering	3
Hours Subtotal		12
PETE 6010	Petroleum Engineering Seminar	3
Degree Program Guided Electives:		21

Petroleum Engineering (CEAT)

PETE 5110	Special Topics in Petroleum Engineering
PETE 5303	Petroleum Geomechanics
PETE 5343	Advanced Reservoir Engineering
PETE 5363	Petroleum Economics and Investments
PETE 5413	Advanced Well Design and Operational Analysis
PETE 5513	Directional Drilling
PETE 5613	Advanced Well Completions
PETE 5990	Special Problems in Petroleum Engineering ¹
PETE 6110	Advanced Topics in Petroleum Engineering

Chemical Engineering (CEAT)

CHE 5123	Advanced Chemical Reaction Engineering
CHE 5373	Process Simulation
CHE 5733	Neural Networks
CHE 5743	Chemical Engineering Process Modeling

Geology (CAS)

GEOL 5023	Petroleum Geology
GEOL 5133	Structural Styles in Oil and Gas Exploration
GEOL 5353	Advanced Well Log Analysis
GEOL 5483	Petroleum Water Management
GEOL 6133	Unconventional Petroleum Reservoirs
GEOL 6283	Geology of Shales
GEOL 6503	Rock Fractures

Mathematics (CAS)

MATH 5063	Calculus of Several Variables
MATH 5023	Advanced Linear Algebra
MATH 5233	Partial Differential Equations
MATH 5263	Introduction to Partial Differential Equations
MATH 5553	Numerical Analysis for Linear Algebra
MATH 5563	Finite Element Methods for Partial Differential Equations

Statistics (CAS)

STAT 5013	Statistics for Experimenters I
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Mechanical Engineering (CEAT)

MAE 5233	Advanced Fluid Dynamics I	
MAE 5253	Multiphase Flow	
MAE 5563	Finite Element Methods	
MAE 5573	Continuum Mechanics	
Hours Subtotal		24
PETE 6000	Doctoral Thesis ²	32
Total Hours		68

¹ A maximum of 3 credit hours of PETE 5990 may be counted toward the guided electives requirement.

² 6 hours of PETE 5000 may be substituted for PETE 6000 or 6 Hours of other coursework may be substituted for PETE 6000 at the discretion of Petroleum Graduate Coordinator.

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Photonics, PhD

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 60 (Beyond the Master's Degree)

Code	Title	Hours
Course Requirements ¹		
Select 3 hours from Electromagnetics:		3
PHYS 5313	Electromagnetic Theory	
ECEN 5613	Electromagnetic Theory	
PHYS 4813	Electromagnetic Radiation	
Select 3 hours from Lasers:		3
PHYS 5163	Lasers	
ECEN 4843	Design of Lasers and Systems	
Select 6 hours from Optics:		6
ECEN 4823	Design of Optical Systems	
PHYS 3213	Optics	
PHYS 5123	Geometrical Optics	
or ECEN 5803	Geometrical Optics	
PHYS 5303	Physical Optics	
or ECEN 5823	Physical Optics	
Select 3 hours from Quantum Mechanics:		3
PHYS 5613	Quantum Mechanics I	
PHYS 4513	Introductory Quantum Mechanics	
Select 12 Hours from Advanced Topics (Optoelectronics, Spectroscopy, Quantum and Nonlinear Optics, Solid State, Photonics Systems, Electromagnetics, Bio/Nano Photonics, and Additional Laboratory Courses		12
ECEN 5853	Ultrafast Optoelectronics	
PHYS 5133	Laser Spectroscopy	
PHYS 6413	Nonlinear Optics	
PHYS 6423	Quantum Optics	
PHYS 5663	Solid State Physics I	
PHYS 6243	Semiconductors I	
PHYS 4263	Introduction to Solid State Physics	
ECEN 5333	Semiconductor Devices	
ECEN 5833	Fiber-Optic Communication Systems	
PHYS 6713	Advanced Electromagnetic Radiation	
ECEN 5613	Electromagnetic Theory	
PHYS 4313	Molecular Biophysics ²	
PHYS/ECEN 68X0 Photonics Lab courses: Topics Vary (Lab)		
ECEN 5843	Microelectronic Fabrication	
Select at least one additional elective course.		3
Hours Subtotal		30
Dissertation ¹		
PHYS 6000	Doctoral Dissertation Research	30
Hours Subtotal		30
Total Hours		60

¹ Combined Coursework and Dissertation to total 60 hours beyond the Master's Degree and 72 hours beyond the Bachelor's Degree.

² For students pursuing the bio/nano photonics option, additional courses from departments other than ECEN and PHYS may be included.

Total Hours: 72 (Beyond the Bachelor's Degree)

Code	Title	Hours
Course Requirements ¹		
Select 3 hours from Electromagnetics:		3
PHYS 5313	Electromagnetic Theory	
ECEN 5613	Electromagnetic Theory	
PHYS 4813	Electromagnetic Radiation	
Select 3 hours from Lasers:		3
PHYS 5163	Lasers	
ECEN 4843	Design of Lasers and Systems	
Select 6 hours from Optics:		6
ECEN 4823	Design of Optical Systems	
PHYS 3213	Optics	
PHYS 5123	Geometrical Optics	
or ECEN 5803	Geometrical Optics	
PHYS 5303	Physical Optics	
or ECEN 5823	Physical Optics	
Select 3 hours from Quantum Mechanics:		3
PHYS 5613	Quantum Mechanics I	
PHYS 4513	Introductory Quantum Mechanics	
Select 12 Hours from Advanced Topics (Optoelectronics, Spectroscopy, Quantum and Nonlinear Optics, Solid State, Photonics Systems, Electromagnetics, Bio/Nano Photonics, and Additional Laboratory Courses		12
ECEN 5853	Ultrafast Optoelectronics	
PHYS 5133	Laser Spectroscopy	
PHYS 6413	Nonlinear Optics	
PHYS 6423	Quantum Optics	
PHYS 5663	Solid State Physics I	
PHYS 6243	Semiconductors I	
PHYS 4263	Introduction to Solid State Physics	
ECEN 5333	Semiconductor Devices	
ECEN 5833	Fiber-Optic Communication Systems	
PHYS 6713	Advanced Electromagnetic Radiation	
ECEN 5613	Electromagnetic Theory	
PHYS 4313	Molecular Biophysics ²	
PHYS/ECEN 68X0 Photonics Lab courses: Topics Vary (Lab)		
ECEN 5843	Microelectronic Fabrication	
Select at least one additional elective course.		3
Hours Subtotal		30
Dissertation ¹		
PHYS 6000	Doctoral Dissertation Research	42
Hours Subtotal		42
Total Hours		72

¹ Combined Coursework and Dissertation to total 60 hours beyond the Master's Degree and 72 hours beyond the Bachelor's Degree.

² For students pursuing the bio/nano photonics option, additional courses from departments other than ECEN and PHYS may be included.

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Physics, PhD

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 60 (Beyond the Master's Degree)

Code	Title	Hours
Required Courses		
PHYS 5113	Statistical Thermodynamics and Kinetic Theory	3
PHYS 5213	Statistical Mechanics	3
PHYS 5313	Electromagnetic Theory	3
PHYS 5413	Classical Mechanics	3
PHYS 5453	Methods of Theoretical Physics	3
PHYS 5613	Quantum Mechanics I	3
PHYS 6313	Quantum Mechanics II	3
Hours Subtotal		21
Electives ¹		
Select a minimum of 9 hours of Physics (PHYS) 5000- or 6000-level courses:		9
Hours Subtotal		9
Research ¹		
PHYS 6000	Doctoral Dissertation Research	30
Hours Subtotal		30
Total Hours		60

¹ Combined elective and research hours should total 39 hours.

Total Hours: 72 (Beyond the Bachelor's Degree)

Code	Title	Hours
Required Courses		
PHYS 5113	Statistical Thermodynamics and Kinetic Theory	3
PHYS 5213	Statistical Mechanics	3
PHYS 5313	Electromagnetic Theory	3
PHYS 5413	Classical Mechanics	3
PHYS 5453	Methods of Theoretical Physics	3
PHYS 5613	Quantum Mechanics I	3
PHYS 6313	Quantum Mechanics II	3
Hours Subtotal		21
Electives ²		
Select a minimum of 9 hours of Physics (PHYS) 5000- or 6000-level courses:		9
Hours Subtotal		9
Research ²		
PHYS 6000	Doctoral Dissertation Research	42
Hours Subtotal		42
Total Hours		72

² Combined elective and research hours should total 51 hours.

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Plant Biology, PhD

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 60 (Beyond the Master's Degree)

Code	Title	Hours
Required Courses		
PBIO 5110	Special Topics in Plant Biology (Professional Development)	1
PBIO 5850	Plant Biology Seminar	2
PBIO 6000	Doctoral Research	15
Hours Subtotal		18
Electives		
Select 42 graduate credit hours at the 5000 level or higher from the following: BIOC, BIOL, CHEM, CS, ENVR, GENE, GEOG, GEOL, MATH, MICR, PBIO, PHYS, PLNT, NREM, STAT		42
Comprehensive Exams Required		
Hours Subtotal		42
Total Hours		60

Total Hours: 90 (Beyond the Bachelor's Degree)

Code	Title	Hours
Required Courses		
PBIO 5110	Special Topics in Plant Biology (Professional Development)	1
PBIO 5850	Plant Biology Seminar	2
PBIO 6000	Doctoral Research	15
Hours Subtotal		18
Electives		
Select 72 graduate credit hours at the 5000 level or higher from the following: BIOC, BIOL, CHEM, CS, ENVR, GENE, GEOG, GEOL, MATH, MICR, PBIO, PHYS, PLNT, NREM, STAT		72
Comprehensive Exams Required		
Hours Subtotal		72
Total Hours		90

Additional Plant Biology, PhD, Requirements

- Minimum grade of "B" in all courses

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Plant Pathology, PhD

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 60 (Beyond the Master's Degree)

Code	Title	Hours
Required Courses		
Introductory (one is required if not previously taken)		
PLP 3343	Principles of Plant Pathology (Introductory - no graduate credit)	
PLP 5343	Principles of Plant Pathology	3
Hours Subtotal		3
Pathogens courses		
PLP 5104	Mycology	4
PLP 5724	Physiology of Host-Pathogen Interactions	4
Hours Subtotal		8
Additional Pathogen courses		
Select 7-8 hours, depending on advisory committee decision.		7-8
PLP 5003	Plant Nematology	
PLP 5014	Plant Virology	
PLP 5304	Phytobacteriology	
Hours Subtotal		7-8
Concepts courses ¹		
Select 6-7 hours, depending on advisory committee decision.		6-7
PLP 5524	Integrated Management of Insect Pests and Pathogens	
PLP 5613	Host Plant Resistance	
PLP 6303	Soilborne Diseases of Plants	
Hours Subtotal		6-7
Professionalism		
PLP 5870	Scientific Presentations (Both fall and spring semesters - 1 credit hour each.)	2
Optional if two semesters of PLP 5870 were previously completed during an OSU ENTO-PLP master's degree program.		
Hours Subtotal		2
Recommended course:		
PLP 5992	Career Skills and Professionalism for Scientists	
Plus additional courses to complete the graduate program and Plan of Study.		32-34
Hours Subtotal		32-34
Total Hours		60

¹ Completion of PLP 5524 or PLP 5613 is required for the degree program.

Total Hours: 90 (Beyond the Bachelor's Degree)

Code	Title	Hours
Required Courses		
Introductory (one is required if not previously taken)		
PLP 3343	Principles of Plant Pathology (Introductory - no graduate credit)	

PLP 5343	Principles of Plant Pathology	3
Hours Subtotal		3
Pathogens courses		
PLP 5104	Mycology	4
PLP 5724	Physiology of Host-Pathogen Interactions	4
Hours Subtotal		8
Additional Pathogen courses		
Select 7-8 hours, depending on advisory committee decision.		7-8
PLP 5003	Plant Nematology	
PLP 5014	Plant Virology	
PLP 5304	Phytobacteriology	
Hours Subtotal		7-8
Concepts courses ¹		
Select 6-7 hours, depending on advisory committee decision.		6-7
PLP 5524	Integrated Management of Insect Pests and Pathogens	
PLP 5613	Host Plant Resistance	
PLP 6303	Soilborne Diseases of Plants	
Hours Subtotal		6-7
Professionalism		
PLP 5870	Scientific Presentations (Both fall and spring semesters - 1 credit hour each.)	2
Optional if two semesters of PLP 5870 were previously completed during an OSU ENTO-PLP master's degree program.		
Hours Subtotal		2
Recommended course:		
PLP 5992	Career Skills and Professionalism for Scientists	
Plus additional courses to complete the graduate program and Plan of Study.		62-64
Hours Subtotal		62-64
Total Hours		90

¹ Completion of PLP 5524 or PLP 5613 is required for the degree program.

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Psychology: Clinical, PhD

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 106 (Beyond the Bachelor's Degree)

Code	Title	Hours
Core Courses		
Select three courses:		9
PSYC 5823	Cognitive Processes	
PSYC 5813	Lifespan Cognitive Developmental Psychology	
PSYC 6483	Neurobiological Psychology	
PSYC 6253	Seminar in Human Development	
PSYC 6563	Advanced Social Psychology	
PSYC 6613	Experimental Learning Theories	
PSYC 5304	Quantitative Methods in Psychology I	4
PSYC 5314	Quantitative Methods in Psychology II	4
PSYC 6223	Research Design	3
PSYC 5660	Teaching Practicum	2
PSYC 5000	Thesis (minimum of 6 hours)	6
PSYC 6000	Dissertation (minimum of 15 hours)	15
3 Hours Quantitative Requirement		3
3 Hours History Requirement		3
Fulfilled by PSYC 4493, outside course, or waived by CTC if psychology was major or minor as undergraduate.		
Hours Subtotal		49

Clinical Core Requirements

PSYC 5113	Psychopathology	3
PSYC 5333	Systems of Psychotherapy	3
PSYC 5153	Cognitive Assessment	3
PSYC 6753	Assessment of Personality	3
PSYC 6083	Principles of Evidence-Based Psychological Treatment	3
PSYC 6133	Ethnic and Cultural Diversity in Psychotherapy	3
PSYC 6640	Clinical Practicum	18
PSYC 6650	Practicum (continuously enrolled 1 hour for a minimum of 2 years)	6
PSYC 6990	Advanced Internship in Clinical Psychology (1 hour for three semesters)	3
Hours Subtotal		45

Subspecialty Training

Select 12 from one of the following subspecialties: 12

Adult Psychopathology

Student must take four elective courses chosen in consultation with program advisor

Clinical Child Psychology

The following courses should be taken by students interested in the Clinical Child Psychology subspecialty. Students must take two additional elective courses, to be determined by the student and his or her advisor.

PSYC 6173	Child Psychopathology and Treatment
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PSYC 6723	Child Diagnostic Methods
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Health Psychology

The following courses should be taken by students interested in the Health Psychology subspecialty. Student must take two additional elective courses, to be determined by the student and his or her advisor.

PSYC 6443	Behavioral Medicine
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PSYC 6143	The Psychology of Substance Abuse
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Pediatric Psychology

The following courses should be taken by students interested in the Pediatric Psychology subspecialty.

PSYC 6173	Child Psychopathology and Treatment
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PSYC 6723	Child Diagnostic Methods
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PSYC 6523	Family Treatment Methods
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PSYC 6453	Pediatric Psychology
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Hours Subtotal	12
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Total Hours	106
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Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Psychology: Experimental Psychology, PhD

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 90 (Beyond the Bachelor's Degree)

Code	Title	Hours
Departmental Core Courses		
PSYC 5304	Quantitative Methods in Psychology I	4
PSYC 5314	Quantitative Methods in Psychology II	4
PSYC 6223	Research Design	3
PSYC 5660	Teaching Practicum	1-2
PSYC 5000	Thesis	6
PSYC 6000	Dissertation	15
Select 3 hours in additional quantitative electives (within or outside department)		3
Select 9 hours from the following:		9
PSYC 5823	Cognitive Processes	
PSYC 6483	Neurobiological Psychology	
PSYC 6563	Advanced Social Psychology	
PSYC 6613	Experimental Learning Theories	
PSYC 5913	Lifespan Social Developmental Psychology	
Hours Subtotal		45-46
Experimental Core Courses		
Select 9 hours from the following:		9
<i>Cognitive</i>		
PSYC 4223	Decision Making and Problem Solving	
PSYC 5620	Seminar in Psychology (Stereotyping and Prejudice in Social Cognition)	
PSYC 5823	Cognitive Processes	
PSYC 6393	Language Development	
<i>Comparative-Neurobiology</i>		
PSYC 5620	Seminar in Psychology (Evolutionary Social Sciences)	
PSYC 6483	Neurobiological Psychology	
PSYC 6583	Developmental Psychobiology	
PSYC 6613	Experimental Learning Theories	
<i>Developmental Psychology</i>		
PSYC 4243	Psychology of Aging	
PSYC 5813	Lifespan Cognitive Developmental Psychology	
PSYC 5913	Lifespan Social Developmental Psychology	
PSYC 6583	Developmental Psychobiology	
PSYC 6393	Language Development	
HDFS 5243	Infant and Early Childhood Development and Attachment	
HDFS 5433	Theories of Aging	
HDFS 5583	Intimate Relationships and Sexuality across the Lifespan	
<i>Social-Personality Track</i>		
PSYC 4333	Personality	

PSYC 5620	Seminar in Psychology (Stereotyping and Prejudice in Social Cognition)	
PSYC 5620	Seminar in Psychology (Evolutionary Social Sciences)	
PSYC 5620	Seminar in Psychology	
PSYC 6393	Language Development	
PSYC 6563	Advanced Social Psychology	
Hours Subtotal		9
Additional Hours May Be Taken From the Following:		
Hours needed to reach 80 hours		35-36
PSYC 5380	Research	
PSYC 6000	Dissertation	
Hours Subtotal		35-36
Total Hours		90

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

School Administration, EdD

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 64

Code	Title	Hours
Degree Core		
EDLE 6483	School Leadership, Culture and Ethics	3
EDLE 6493	School Improvement/Reform	3
EDLE 6633	School Leadership and Community Collaboration	3
Hours Subtotal		9
Research		
EDLE 6853	Research Traditions in Educational Leadership	3
Select 6 hours from the following:		6
SCFD 6123	Qualitative Research I	
SCFD 6193	Qualitative Research II ¹	
REMS 6003	Analyses of Variance ¹	
REMS 6013	Multiple Regression Analysis in Behavioral Studies ¹	
REMS 6373	Program Evaluation ¹	
REMS 5373	Educational Measurements ¹	
Hours Subtotal		9
Fieldwork		
EDLE 6883	Internship in Education I	3
EDLE 6893	Internship in Education II	3
EDLE 6910	Practicum	3
Hours Subtotal		9
Emphasis Core		
EDLE 6353	The Superintendency	3
EDLE 6363	Special Topics in School Finance Policy	3
EDLE 6423	The Politics of Education	3
EDLE 6453	Special Topics in Education Law	3
EDLE 6603	Organizational Theory in Education	3
Hours Subtotal		15
Cognate		
Select 12 hours		12
Suggested Courses:		
EDLE 6393	The Human Factor in Administering Schools	
EDLE 6710	Special Problems	
EDTC 5773	Instructional Systems Management	
REMS 6373	Program Evaluation	
Hours Subtotal		12
Dissertation		
10 hours required		10
Hours Subtotal		10

Note: Cognate and any additional courses must be approved by the student's committee.

Total Hours **64**

¹ Denotes classes with prerequisites.

Graduate College Doctor of Education (EdD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Education (EdD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

School Psychology, EdS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 85

Code	Title	Hours
Required Courses		
SPSY 5023	Introduction to School Psychology	3
SPSY 5113	Developmental Psychopathology	3
EPSY 5103	Human Development in Psychology	3
REMS 5013	Research Design and Methodology	3
SPSY 5110	Observation and Participation Field Experience for School Psychology Majors	2
SPSY 5793	Individual Intellectual Assessment of Children and Youth	3
REMS 6003	Analyses of Variance	3
SPSY 5000	Master's Thesis	2
SPSY 6313	Advanced Interventions for Increased Academic Achievement	3
SPSY 6143	Introduction to Developmental Psychopharmacology	3
SPSY 5803	Advanced Cognitive Assessment and Theory	3
FDEP 5493	Psychology of Learning and Behavior	3
SPSY 6333	Instructional Assessment and Consultation	3
SPSY 5853	Applied Behavior Analysis	3
SPSY 5210	Introductory Practicum in School Psychology	2
SPSY 5000	Master's Thesis	2
SPSY 5813	Parent and Family Intervention in School Psychology	3
SPSY 6343	Behavioral Assessment and Consultation	3
SPSY 6113	Behavioral and Personality Assessment of Children and Youth	3
SPSY 5210	Introductory Practicum in School Psychology	2
FDEP 5183	Theories of Social Psychology	3
SPSY 6253	Single Case Designs in Behavior Analytic Settings	3
SPSY 5873	Applied Behavior Analysis II	3
SPSY 5510	Advanced Practicum in School Psychology	3
SPSY 6033	Introduction to Psychotherapy with Children and Adolescents	3
SPSY 5510	Advanced Practicum in School Psychology	3
SPSY 5503	Crisis Intervention and Emergency Action in School Settings	3
SPSY 5310	Practicum in Child and Adolescent Therapy	3
SPSY 6210	Specialist Internship in School Psychology	3
SPSY 6210	Specialist Internship in School Psychology	3
Total Hours		85

Graduate College Specialist in Education (EdS) Requirements

Learn more about Graduate College 2021-2022 Specialist in Education (EdS) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

School Psychology, PhD

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 128

Code	Title	Hours
Core Courses		
<i>Psychological and Education Foundations/Scientific Research and Data Analysis</i>		
REMS 5953	Statistical Methods in Education	3
REMS 5013	Research Design and Methodology	3
REMS 6003	Analyses of Variance	3
REMS 6013	Multiple Regression Analysis in Behavioral Studies	3
REMS 6663	Applied Multivariate Research in Behavioral Studies	3
EPSY 6153	Advanced Research in Educational Psychology	3
EPSY 5000	Master's Thesis ¹	2
EPSY 6000	Doctoral Dissertation	15
EPSY 6253	Single Case Designs in Behavior Analytic Settings	3
<i>History and Systems</i>		
EPSY 6133	History & Systems of Psychology	3
<i>Social Aspects/Diversity</i>		
Select one of the following courses:		3
EPSY 5183	Theories of Social Psychology	
PSYC 6563	Advanced Social Psychology	
<i>Biological Aspects of Behavior</i>		
EPSY 6143	Intro to Developmental Psychopharmacology	3
Select 3 hours from the following:		3
SPSY 6133	Biological Basis of Behavior	
PSYC 6483	Neurobiological Psychology	
<i>Cognitive/Affective Aspects of Behavior</i>		
EPSY 5463	Psychology of Learning	3
<i>Human Development/Individual Differences and Disabilities</i>		
EPSY 5103	Human Development in Psychology	3
EPSY 5113	Child Psychopathology	3
<i>Education Service Delivery</i>		
EDUC 5910	Educational Field Experiences	2
EPSY 6313	Advanced Interventions for Increased Academic Achievement	3
<i>School Psychology Professional Practice Skills</i>		
<i>School Psychology Professional Standards</i>		
EPSY 5023	Intro to School Psych Services	3
EPSY 6030	Doctoral Seminar: Ethics	3
<i>Assessment for Intervention/Measurement</i>		
EPSY 5793	Individual Intellectual Assessment of Children and Youth	3
EPSY 5803	Advanced Intellectual Assessment	3
EPSY 6113	Child Personality Assessment	3

<i>Consultation/Prevention/Intervention/Program Evaluation</i>		
EPSY 6333	Instructional Assessment and Consultation	3
EPSY 5853	Applied Behavioral Analysis	3
EPSY 5873	Applied Behavioral Analysis II	3
EPSY 6343	Behavioral Assessment and Consultation	3
EPSY 5503	Crisis Intervention & Emergency in School Settings	3
<i>Direct Service/Psychotherapy</i>		
EPSY 6033	Introduction to Psychotherapy with Children & Adolescents	3
EPSY 5813	Parent and Family Interventions in School Psychology	3
Choose at least one of the following:		3
CPSY 5320	Seminar in Counseling Psychology	
CPSY 6313	Advanced Group Interventions	
CPSY 6553	Advanced Practice in Marital and Family Treatment	
PSYC 6083	Principles of Evidence-Based Psychological Treatment	
<i>Practicum/Internship</i>		
EDUC 5910	Educational Field Experiences	2
EPSY 5210	Intro Practicum in School Psychometry (120 hours)	2
EPSY 5210	Intro Practicum in School Psychometry	2
EPSY 5310	Practicum in Child and Adolescent Therapy (120 hours)	3
EPSY 5510	Practicum in School Psychology (600 hours)	3
EPSY 5510	Practicum in School Psychology	3
EPSY 6310	Doctoral Practicum in School Psychology (400 hours)	2
EPSY 6310	Doctoral Practicum in School Psychology	2
EPSY 6610	Doctoral Internship (1500-2000 hours)	2
EPSY 6610	Doctoral Internship	2
EPSY 6610	Doctoral Internship	2
Hours Subtotal		128
Total Hours		128

¹ Total hours for degree could increase by four depending on whether student chooses thesis or non-thesis option.

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Sociology, PhD

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 60 (Beyond the Master's Degree)

Code	Title	Hours
Core Coursework		
<i>Sociological Theory</i>		
	Select 6 hours of approved coursework.	6
<i>Research Methods/Statistics</i>		
	Select 15 hours of approved Research Methods/Statistics coursework.	15
Two Comprehensive Areas		
	Select 12 hours from two approved comprehensive areas.	12
Hours Subtotal		33
Electives ¹		
	Select 39-42 hours, based on number of dissertation hours. ¹	39-42
Hours Subtotal		39-42
Doctoral Thesis ¹		
	Select 15-18 hours, depending on elective hours. ¹	15-18
Hours Subtotal		15-18
Pro-Seminar		
	Select 1 hour of approved Pro-Seminar coursework.	1
Hours Subtotal		1
Total Hours		60

¹ Combined elective and dissertation hours must total 57 hours.

Total Hours: 91 (Beyond the Bachelor's Degree)

Code	Title	Hours
Core Coursework		
<i>Sociological Theory</i>		
	Select 6 hours of approved coursework.	6
<i>Research Methods/Statistics</i>		
	Select 15 hours of approved Research Methods/Statistics coursework.	15
Two Comprehensive Areas		
	Select 12 hours from two approved comprehensive areas.	12
Hours Subtotal		33
Electives ¹		
	Select 39-42 hours, based on number of dissertation hours. ¹	39-42
Hours Subtotal		39-42
Doctoral Thesis ¹		
	Select 15-18 hours, depending on elective hours. ¹	15-18
Hours Subtotal		15-18
Pro-Seminar		
	Select 1 hour of approved Pro-Seminar coursework.	1
Hours Subtotal		1
Total Hours		91

¹ Combined elective and dissertation hours must total 57 hours.

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Soil Science, PhD

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 60

Code	Title	Hours
Required Courses		
SOIL 5020	Graduate Seminar	1
SOIL 5020	Graduate Seminar	1
SOIL 5131	Professional Development Colloquium in Plant and Soil Sciences	1
SOIL 5120	Teaching Practicum in Plant and Soil Sciences	1
Additional Coursework Hours		23
Hours Subtotal		27
Thesis and Electives		
Required Minimum Thesis Credit Hours		15
Additional Minimum Coursework or Thesis Credit Hours		18
Hours Subtotal		33
Total Hours		60

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Statistics, PhD

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 90 (Beyond the Bachelor's Degree)

Code	Title	Hours
Required Courses		
STAT 5123	Probability Theory	3
STAT 5223	Statistical Inference	3
STAT 5013	Statistics for Experimenters I	3
STAT 5023	Statistics for Experimenters II	3
STAT 5093	Statistical Computing	3
STAT 6113	Probability Theory	3
STAT 6203	Large Sample Inference	3
STAT 5303	Experimental Designs	3
STAT 5323	Theory of Linear Models I	3
STAT 5333	Theory of Linear Models II	3
STAT 5513	Multivariate Analysis	3
STAT 6010	Statistics Literature	2
STAT 6223	Advanced Statistical Inference	3
STAT 6910	Special Problems	3
MATH 5043	Advanced Calculus I	3
MATH 5053	Advanced Calculus II	3
MATH 5143	Real Analysis I	3
Hours Subtotal		50
Dissertation		
Dissertation Research		15
Electives		
Electives chosen in consultation with advisor		25
Total Hours		90

Graduate College Doctor of Philosophy (PhD) Requirements

Learn more about Graduate College 2021-2022 Doctor of Philosophy (PhD) Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Graduate Certificates

- Aviation and Aerospace Administration, GCRT (p. 2889)
- Big Data Analytics, GCRT (p. 2890)
- Bioinformatics, GCRT (p. 2891)
- Brand Communication, GCRT (p. 2892)
- Building Level Leadership, GCRT (p. 2893)
- Business Analytics and Data Science, GCRT (p. 2894)
- Business Sustainability, GCRT (p. 2895)
- Business, GCRT (p. 2896)
- College Teaching, GCRT (p. 2897)
- Comparative and International Education, GCRT (p. 2898)
- Developmental Disabilities, GCRT (p. 2899)
- Dietetics, GCRT (p. 2900)
- District Level Leadership, GCRT (p. 2901)
- Educational and Psychological Measurement, GCRT (p. 2902)
- Effective Teaching in Elementary Schools, GCRT (p. 2903)
- Effective Teaching in Secondary Schools, GCRT (p. 2904)
- Elementary Mathematics Specialist, GCRT (p. 2905)
- Engineering and Technology Management, GCRT (p. 2906)
- Entrepreneurship, GCRT (p. 2907)
- Environmental Science with Regulatory Certifications, GCRT (p. 2908)
- Family Financial Planning, GCRT (p. 2909)
- Finance and Investment Banking, GCRT (p. 2910)
- Forensic Arson, Explosives, Firearms, and Toolmarks Investigation, GCRT (p. 2911)
- Forensic Investigative Sciences, GCRT (p. 2912)
- Forensic Psychology, GCRT (p. 2913)
- Global Issues, GCRT (p. 2914)
- Grassland Management, GCRT (p. 2915)
- Health Analytics, GCRT (p. 2916)
- Health Care Administration, GCRT (p. 2917)
- Health Care Administration: Finance, GCRT (p. 2918)
- Health Care Administration: Global Health, GCRT (p. 2919)
- Hidden Student Populations, GCRT (p. 2920)
- Human Resource Management, GCRT (p. 2921)
- Infant Mental Health, GCRT (p. 2922)
- Information Assurance, GCRT (p. 2923)
- Integrative Design of Building Envelope, GCRT (p. 2924)
- Interdisciplinary Toxicology, GCRT (p. 2925)
- International Disaster and Emergency Management, GCRT (p. 2926)
- K-12 STEM Educator, GCRT (p. 2927)
- Marketing Analytics, GCRT (p. 2928)
- Medical Sciences, GCRT (p. 2929)
- Museum and Curatorial Studies, GCRT (p. 2930)
- Neuroscience, GCRT (p. 2931)
- Non-Profit Management, GCRT (p. 2932)
- Online Teaching, GCRT (p. 2933)
- Program Evaluation, GCRT (p. 2934)
- Public Health in Rural and Underserved Communities, GCRT (p. 2935)
- Recreation and Leisure Management, GCRT (p. 2936)
- School Library Certification, GCRT (p. 2937)
- Special Education, GCRT (p. 2938)
- Sport Communication, GCRT (p. 2939)
- Statistical Methods and Analyses in Educational and Behavioral Sciences, GCRT (p. 2940)
- Substance Abuse Counseling, GCRT (p. 2941)
- Supply Chain and Logistics, GCRT (p. 2942)
- Teaching English to Speakers of Other Languages, GCRT (p. 2943)
- Workforce and Adult Education, GCRT (p. 2944)

Aviation/Aerospace Administration, GCRT

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 12

Code	Title	Hours
Required Courses		
AVED 5593	Influencing Public Policy in the Aerospace Industry	3
AVED 5663	Issues in the Airline/Aerospace Industry	3
AVED 5773	Historical Significance of Aviation	3
AVED 6553	Foundations of Airline Executive Leadership	3
Total Hours		12

Graduate College Certificate Requirements

Learn more about Graduate College 2021-2022 Graduate Certificate Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Big Data Analytics, GCRT

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 12

Code	Title	Hours
Required Courses		
CS 5433	Big Data Management	3
CS 5683	Big Data Analytics	3
CS 5783	Machine Learning	3
STAT 5023	Statistics for Experimenters II	3
Total Hours		12

Graduate College Certificate Requirements

Learn more about Graduate College 2021-2022 Graduate Certificate Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Bioinformatics, GCRT

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 16

Code	Title	Hours
Required Courses		
MICR 5203	Bioinformatics	3
BIOC 5930	Advanced Biochemical Techniques (Capstone Project)	1
Electives		
Select 12 hours from the following: ¹		12
<i>Life Sciences Core</i>		
BIOC 6733	Functional Genomics	
PBIO 5553	Molecular Phylogenetic Analysis	
ANSI 5010	Special Problems (Mapping and Marker Assisted Selection)	
PBIO 5110	Special Topics in Plant Biology (Phylogenomics)	
BIOC 5102	Molecular Genetics	
<i>Statistics Core</i>		
STAT 6013	Genetic Statistics	
STAT 5013	Statistics for Experimenters I	
STAT 5023	Statistics for Experimenters II	
STAT 5093	Statistical Computing	
STAT 4203	Mathematical Statistics I	
STAT 4213	Mathematical Statistics II	
<i>Computer Science Core</i>		
CS 5423	Principles of Database Systems	
CS 5433	Big Data Management	
CS 5070	Seminar and Special Problems	
CS 4433	Introduction to Database Systems	
<i>Math Core</i>		
MATH 6590	Topics in Applied Mathematics	
Hours Subtotal		16
Total Hours		16

¹ Select 3 hours from each discipline or more than one from various disciplines with Advisory Committee approval.

Graduate College Certificate Requirements

Learn more about Graduate College 2021-2022 Graduate Certificate Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Brand Communication, GCRT

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 15

Code	Title	Hours
Required Courses		
MC 5733	Responsibility in Mass Communication	3
MC 5283	Citizen Branding	3
Hours Subtotal		6
Electives		
Select 9 hours from the following:		9
MC 5253	International Mass Communication	
MC 5323	Nation Branding	
MC 5613	Storytellers Studio	
MC 5163	Mass Communication Law	
MC 5933	Theories of Persuasion	
MC 5383	Media Relations	
MC 5753	Media And Elections	
MC 5520	Specialized Strategic Communications Applications	
MC 5953	Strategic Health Communications Campaigns	
MC 5020	Advanced Practicum or Internship in Mass Communication	
MC 5113	Methods of Research in Mass Communication	
MKTG 5133	Marketing Management	
Hours Subtotal		9
Total Hours		15

Graduate College Certificate Requirements

Learn more about Graduate College 2021-2022 Graduate Certificate Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Building Level Leadership, GCRT

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 12

Code	Title	Hours
Required Courses		
EDLE 5813	Leadership Theory and Ethical Decision Making	3
EDLE 5953	Developing Educational Organizations	3
Select 6 hours from the following:		6
EDLE 5253	The Principalship	
EDLE 5723	Education Law	
EDLE 5473	Supervision of Instruction	
EDLE 5893	Field Studies Intern II	
Hours Subtotal		12
Total Hours		12

Graduate College Certificate Requirements

Learn more about Graduate College 2021-2022 Graduate Certificate Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Business Analytics and Data Science, GCRT

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 12

Code	Title	Hours
Required Courses		
BAN 5733	Descriptive Business Analytics	3
BAN 5743	Predictive Business Analytics	3
Hours Subtotal		6
Electives		
Select 6 hours from the following:		6
BAN 5511	Web Analytics and Digital Marketing	
BAN 5521	GIS Applications in Marketing Analytics	
BAN 5551	Optimization Applications in Marketing Analytics	
BAN 5561	Customer Lifetime Value Models in Marketing	
BAN 5563	Strategic Marketing and Business Analytics	
BAN 5753	Advanced Business Analytics	
BAN 5763	Advanced Marketing Research Analytics	
MKTG 5243	Base SAS Programming for Database Marketing	
MKTG 5253	Advanced SAS Programming for Marketing Analytics	
MSIS 5633	Predictive Analytics Technologies	
MSIS 5643	Advanced Database Management	
Other graduate courses as approved by the program director.		
Hours Subtotal		6
Total Hours		12

Graduate College Certificate Requirements

Learn more about Graduate College 2021-2022 Graduate Certificate Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Business Sustainability, GCRT

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 12

Code	Title	Hours
Required Core Courses		
MGMT 5033	Management of Sustainable Enterprises	3
MGMT 5083	Corporate and Social Responsibility	3
Hours Subtotal		6
Electives		
Select 6 hours from the following:		6
MGMT 5031	Leading Organizational Change	
MGMT 5051	Creating Ethical Work Places	
MGMT 5061	Managing Confrontations	
MGMT 5073	Management and Ethical Leadership	
MGMT 5093	Management of Nonprofit Organizations	
MGMT 5533	Leadership Challenges	
MGMT 5563	Crisis in Organizations	
EEE 5403	Social Entrepreneurship	
EEE 5603	Entrepreneurship Empowerment in South Africa	
Hours Subtotal		6
Total Hours		12

Graduate College Certificate Requirements

Learn more about Graduate College 2021-2022 Graduate Certificate Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Business, GCRT

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 15

Code	Title	Hours
Required Courses		
MGMT 5113	Individual and Organizational Behavior	3
MKTG 5133	Marketing Management	3
ACCT 5183	MBA Financial Reporting	3
FIN 5013	Business Finance	3
Electives		
Select three hours from the following:		3
ECON 5113	Managerial Economics	
MSIS 5303	Prescriptive Analytics	
EEE 5233	Ideation, Creativity & Innovation	
HTM 5263	Applied Revenue Management in Hospitality and Tourism Management	
Total Hours		15

Graduate College Certificate Requirements

Learn more about Graduate College 2021-2022 Graduate Certificate Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

College Teaching, GCRT

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 12

Code	Title	Hours
Required Courses		
Select 3 hours from the following:		3
CIED 5073	Pedagogical Research (with practicum)	
CIED 6073	Advanced Pedagogical Research (with practicum)	
Hours Subtotal		3
Electives		
Select 9 hours from the following:		9
CIED 5043	Issues in Teaching	
CIED 5093	Curriculum Design	
CIED 5623	Multicultural and Diversity Issues in Curriculum	
CIED 5183	Media Literacy Across the Curriculum	
CIED 6033	Analysis of Teaching	
CIED 6133	Theory to Practice in Education	
EDTC 5503	Facilitating Online Learning	
HESA 6713	Effective Teaching in College and Universities	
HIST 5021	Teaching History at the College Level	
AGED 5813	College Teaching of Agriculture and Natural Resources	
AGED 5823	Advanced Methods of Teaching Agriculture	
EPSY 5473	Psychology of Adult Learning	
EPSY 5983	Instructional Effectiveness in Higher Education	
Hours Subtotal		9
Total Hours		12

Graduate College Certificate Requirements

Learn more about Graduate College 2021-2022 Graduate Certificate Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Comparative and International Education, GCRT

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 12

Code	Title	Hours
Requirements		
Select 12 hours from the following:		12
ANTH 5243	Globalization and Culture	
EDLE 5813	Leadership Theory and Ethical Decision Making	
EDLE 5953	Developing Educational Organizations	
EDLE 6483	School Leadership, Culture and Ethics	
EDLE 6603	Organizational Theory in Education	
HESA 6163	International Issues in Higher Education	
SCFD 5023	The Comparative Approach: Theory, Method, and Practice	
SCFD 5873	Culture, Society and Education	
SCFD 6023	Comparative Education	
SOC 5223	Culture, History and World Systems	
SOC 5653	Gender and the Middle East	
Total Hours		12

Graduate College Certificate Requirements

Learn more about Graduate College 2021-2022 Graduate Certificate Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Developmental Disabilities, GCRT

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 12

Code	Title	Hours
Core Course Requirements		
(non-degree seeking students must begin with one of the following courses when entering the graduate certificate program)		
HDFS 5083	Disabilities in the Family and Community Context	3
HDFS 5283	Developmental Disabilities	3
Specialization Coursework		
Select two courses from the following:		6
HDFS 5153	Policy in Human Development and Family Science	
HDFS 5193	Reflective Practice	
HDFS 5690	Marriage and Family Therapy Practicum	
HDFS 5623	Systems Theory and Applications to the Family	
HDFS 5653	Systemic Approaches to Psychopathology and Psychopharmacology	
Total Hours		12

Graduate College Certificate Requirements

Learn more about Graduate College 2021-2022 Graduate Certificate Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Dietetics, GCRT

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 18

Code	Title	Hours
Core Courses		
NSCI 5123	Research Methods in Nutritional Sciences	3
or REMS 5013	Research Design and Methodology	
NSCI 5033	Macronutrients in Human Nutrition	3
NSCI 5043	Micronutrients in Human Nutrition	3
NSCI 5643	Advanced Medical Nutrition Therapy	3
Hours Subtotal		12
Dietetic Internship Practicum Courses		
NSCI 5412	Dietetic Internship Management Practicum	2
NSCI 5422	Dietetic Internship Clinical Practicum	2
NSCI 5432	Dietetic Internship Community Nutrition Practicum	2
Hours Subtotal		6
Total Hours		18

Graduate College Certificate Requirements

Learn more about Graduate College 2021-2022 Graduate Certificate Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

District Level Leadership, GCRT

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 12

Code	Title	Hours
Required Courses		
EDLE 6873	Leading Schools with Data	3
EDLE 6633	School Leadership and Community Collaboration	3
Select 6 hours from the following: ¹		6
EDLE 6493	School Improvement/Reform	
EDLE 6483	School Leadership, Culture and Ethics	
EDLE 6853	Research Traditions in Educational Leadership	
EDLE 6353	The Superintendency	
EDLE 6453	Special Topics in Education Law	
EDLE 6363	Special Topics in School Finance Policy	
EDLE 6393	The Human Factor in Administering Schools	
EDLE 6893	Internship in Education II	
Total Hours		12

¹ Other education courses may be approved by the certificate coordinator.

Graduate College Certificate Requirements

Learn more about Graduate College 2021-2022 Graduate Certificate Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Educational and Psychological Measurement, GCRT

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 12

Code	Title	Hours
Requirements		
REMS 5953	Statistical Methods in Education	3
Select 9 hours of the following:		9
REMS 5373	Educational Measurements	
REMS 6023	Psychometric Theory	
REMS 6033	Factor Analysis in Behavioral Research	
REMS 6673	Item Response Theory	
Total Hours		12

Graduate College Certificate Requirements

Learn more about Graduate College 2021-2022 Graduate Certificate Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Effective Teaching in Elementary Schools, GCRT

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 14

Code	Title	Hours
CIED 4362	Design and Management of the Elementary School Classroom	2
CIED 5323	Teaching Social Studies in the Schools	3
CIED 5893	Reading Processes and Practices GR 1-8	3
SMED 5013	Mathematics Education: Theory and Practice(Grade 1-4)	3
SMED 5083	Teaching Science in the Elementary School (Grades 1-8)	3
Total Hours		14

Graduate College Certificate Requirements

Learn more about Graduate College 2021-2022 Graduate Certificate Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Effective Teaching in Secondary Schools, GCRT

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 12

Code	Title	Hours
Required Courses		
To achieve certificate objectives, students who are already alternative or emergency certified would complete the following twelve hours of coursework:		
CIED 5333	Effective Classroom Management for Secondary Schools	3
CIED 5343	Introduction to K-12 English Language Learners	3
CIED 5010	Practicum for Early Career Secondary Teachers	3
Select one methods course from the following options:		3
CIED 5403	Teaching and Learning in the Secondary Schools: English Language Arts Methods	
CIED 5413	Teaching and Learning in the Secondary Schools: Social Studies Methods	
SMED 5153	Methods for Teaching Secondary Math	
SMED 5143	Methods for Teaching Secondary Science	
AGED 5823	Advanced Methods of Teaching Agriculture	
Total Hours		12

Graduate College Certificate Requirements

Learn more about Graduate College 2021-2022 Graduate Certificate Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Elementary Mathematics Specialist, GCRT

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 18

Code	Title	Hours
Required Courses		
SMED 5253	Teaching Rational Number Concepts, Proportional Reasoning, and Classroom Interactions	3
SMED 5273	Number Concepts and Assessment at the Elementary Level (PK-6)	3
SMED 5913	Teaching Geometry and Spatial Visualization	3
SMED 5923	Teaching Algebra and Mathematical Tasks	3
SMED 5933	Teaching Data and Probability in Schools	3
SMED 5943	Mathematics Leadership and Coaching (includes a minimum of 30 hours of field experience)	3
Each of these courses are tied directly to the State EMS standards.		
Total Hours		18

Graduate College Certificate Requirements

Learn more about Graduate College 2021-2022 Graduate Certificate Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Engineering and Technology Management, GCRT

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 12

Code	Title	Hours
Required Course		
ETM 5111	Introduction to Strategy, Technology and Integration	1
Elective Courses		
Select 11 hours of the following:		11
ETM 5221	Engineering Teaming	
ETM 5241	Strategic Project Management	
ETM 5291	Failure Mode and Effects Analysis in Design	
ETM 5341	Leadership Strategies for Technical Professionals	
ETM 5351	Planning Technical Projects	
ETM 5371	Ethics for Practicing Engineers	
ETM 5391	New Product Introduction and Commercialization	
ETM 5411	Engineering Economic Analysis	
ETM 5461	Intellectual Property Management	
ETM 5471	Introduction to System Safety	
ETM 5481	Sustainable Enterprise Strategies	
ETM 5531	Contract Law in Engineering and Technology	
ETM 5253	Engineering Problem Solving and Decision-Making	
ETM 5943	Lean Sigma Implementation	
ETM 5143	Strategic Decision Analysis for Engineering and Technology Managers	
ETM 5283	Strategic Planning	
ETM 5153	Foundations of Engineering Management	
ETM 5163	Business Innovation and Technology	
Total Hours		12

Graduate College Certificate Requirements

Learn more about Graduate College 2021-2022 Graduate Certificate Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Entrepreneurship, GCRT

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 12

Code	Title	Hours
Required Courses		
EEE 5233	Ideation, Creativity & Innovation	3
EEE 5333	Launching a Business: The First 100 Days	3
Hours Subtotal		6
Electives		
Select 6 hours from the following:		6
EEE 5133	Dilemmas and Debates in Entrepreneurship	
EEE 5223	Entrepreneurial Marketing	
EEE 5263	Corporate Entrepreneurship	
EEE 5313	Emerging Enterprise Consulting	
EEE 5403	Social Entrepreneurship	
EEE 5513	Growing Small and Family Ventures	
EEE 5610	Advanced Entrepreneurship Practicum (Advanced Practicum CIE Scholar - special permission required)	
EEE 5653	Venture Capital	
EEE 5713	Native American Entrepreneurship	
EEE 5993	Preparing Effective Business Plans	
Hours Subtotal		6
Total Hours		12

Graduate College Certificate Requirements

Learn more about Graduate College 2021-2022 Graduate Certificate Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Environmental Science with Regulatory Certifications, GCRT

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 12

Code	Title	Hours
ENVR 5593	Hazardous Waste Operations and Emergency Response: HAZWOPER	3
ENVR 5303	Issues in Environmental Sustainability	3
ENVR 5573	Applied Standards for Environmental Managers	3
ENVR 5583	Safety Aspects for Environmental Managers	3
Total Hours		12

Graduate College Certificate Requirements

Learn more about Graduate College 2021-2022 Graduate Certificate Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Family Financial Planning, GCRT

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 18

Code	Title	Hours
Course Requirements		
FFP 5403	Estate Planning for Families	3
FFP 5453	Retirement Planning, Employee Benefits and the Family	3
FFP 5553	Insurance Planning for Families	3
FFP 5603	Investing for the Family's Future	3
FFP 5653	Personal Income Tax for Family Financial Planning	3
FFP 5803	Case Studies in Family Financial Planning	3
Total Hours		18

Graduate College Certificate Requirements

Learn more about Graduate College 2021-2022 Graduate Certificate Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Finance and Investment Banking, GCRT

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

A student may not have a grade lower than "C" and must maintain a grade-point-average of 3.0 over all courses applicable to this certificate.

Total Hours: 15

Code	Title	Hours
Required Courses		
FIN 5013	Business Finance ¹	3
FIN 5053	Theory and Practice of Financial Management	3
FIN 5223	Investment Theory and Strategy	3
FIN 5343	Valuation and Financial Modeling	3
Select 1 course from the following:		3
FIN 5653	Bond Markets	
FIN 5550	Special Topics in Finance (Portfolio Management)	
FIN 5763	Derivative Securities and the Management of Financial Price Risk	
FIN 5363	Energy Finance	
FIN 5833	Student Managed Investment Fund	
FIN 5550	Special Topics in Finance (Securities Industry Essentials)	
FIN 5550	Special Topics in Finance (Computational Finance)	
Total Hours		15

¹ If a student has taken the equivalent of FIN 5013, they need to take an extra elective.

Graduate College Certificate Requirements

Learn more about Graduate College 2021-2022 Graduate Certificate Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Forensic Arson, Explosives, Firearms, and Toolmarks Investigation, GCRT

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 12

Code	Title	Hours
Required Hours		
<i>Degree Core</i>		
Select 6 hours from the following:		6
FRNS 5013	Survey of Forensic Sciences	
FRNS 5063	Ethical Research and Scientific Writing	
FRNS 5073	Quality Assurance in Forensic Science	
FRNS 5613	Criminalistics and Evidence Analysis	
FRNS 5653	The Law and Expert Evidence	
FRNS 5963	Forensic Statistics	
Hours Subtotal		6
Electives		
Select 6 hours from the following:		6
FRNS 5103	The Chemistry of Pyrotechnics	
FRNS 5113	Essential Science for Explosive Operators	
FRNS 5123	Fire Dynamics in Forensic Investigations	
FRNS 5133	Ordnance Identification and Recognition	
FRNS 5143	Methods in Fire and Explosion Investigation NFPA 921/1033	
FRNS 5153	Explosives Research, Testing and Evaluation Methods	
FRNS 5183	Computer Fire Modeling	
FRNS 5423	Blast Injuries and Effects	
FRNS 5443	Interdisciplinary Post Blast Investigation	
FRNS 5663	Destructive Devices/Explosives: Law and Regulations	
FRNS 5673	Intelligence for Forensic Investigators	
FRNS 5683	Digital and Multimedia Evidence for Investigators	
FRNS 5713	Forensic Psychology	
FRNS 5723	Advanced Forensic Psychology	
FRNS 5803	Circuit Exploitation of Destructive Devices	
FRNS 5813	Building Construction and Fire/Explosion Forensic Examination	
FRNS 5823	Forensic Examination of Fire Protection Systems	
FRNS 5833	Identification of Destructive Device Fuzing Systems	
FRNS 5853	Electrical Theory and Failure Analysis in Forensic Fire Investigations	
FRNS 5873	Firearms and Toolmarks	
FRNS 5990	Special Topics in Forensic Sciences (Forensic Evidence Processing for Post-Blast Investigations)	

FRNS 5990	Special Topics in Forensic Sciences (Advanced Forensic Evidence Processing for Post-Blast Investigations)	
FRNS 5990	Special Topics in Forensic Sciences (Introduction to Digital Evidence)	
FRNS 5990	Special Topics in Forensic Sciences	
FRNS 5990	Special Topics in Forensic Sciences (Forensic Engineering for Investigators)	
FRNS 5990	Special Topics in Forensic Sciences (Forensic Examination of Firearms)	
FRNS 5990	Special Topics in Forensic Sciences (Advanced Forensic Examination of Firearms)	
FRNS 5990	Special Topics in Forensic Sciences (Forensic Examination of Toolmarks)	
FRNS 5990	Special Topics in Forensic Sciences (Advanced Forensic Examination of Toolmarks)	
FRNS 6123	Advanced Fire Dynamics	
FRNS 6173	Advanced Interdisciplinary Post Blast Investigation	
FRNS 6183	Advanced Computer Fire Modeling	
FRNS 6423	Advanced Blast Injuries and Effects	
FRNS 6843	Advanced Destructive Device Circuit Exploitation	
FRNS 6853	Advanced Electrical Theory and Failure Analysis in Forensic Fire Investigations	
Hours Subtotal		6
Total Hours		12

Graduate College Certificate Requirements

Learn more about Graduate College 2021-2022 Graduate Certificate Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Forensic Investigative Sciences, GCRT

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Minimum GPA: 3.0 in all courses applicable to the Graduate Certificate with no grade lower than a "C"

Total Hours: 12

Code	Title	Hours
Core Courses		
FRNS 5013	Survey of Forensic Sciences	3
FRNS 5613	Criminalistics and Evidence Analysis	3
Guided Electives		
FRNS 5970	Directed Readings in Forensic Sciences	3
FRNS 5990	Special Topics in Forensic Sciences	3
Total Hours		12

Graduate College Certificate Requirements

Learn more about Graduate College 2021-2022 Graduate Certificate Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Forensic Psychology, GCRT

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Minimum GPA: 3.00 in all courses

Total Hours: 12

Code	Title	Hours
Core Requirements		
FRNS 5013	Survey of Forensic Sciences	3
FRNS 5613	Criminalistics and Evidence Analysis	3
FRNS 5713	Forensic Psychology	3
FRNS 5733	Forensic Victimology	3
Total Hours		12

Graduate College Certificate Requirements

Learn more about Graduate College 2021-2022 Graduate Certificate Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Global Issues, GCRT

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 15

Code	Title	Hours
Core Courses		
Select nine hours from the following:		9
GS 5013	Contemporary Issues in Global Studies	
GS 5213	Global Trade Economics	
GS 5223	Culture, History and World Systems	
GS 5233	Global Competitive Environment	
GS 5243	Trade and Investment Promotion	
GS 5313	Global Communication and Public Diplomacy	
GS 5323	Nation Branding	
GS 5333	Certified Global Business Professional	
GS 5343	Geopolitics of New Media	
GS 5513	Global Crisis Management	
GS 5523	Transnational Criminal Organizations and the War on Drugs	
GS 5533	Complex Emergencies	
GS 5543	International Dimensions of Fire and Emergency Management	
GS 5553	Global Poverty and Inequality	
Hours Subtotal		9
Electives		
Choose any two courses from one of the focus areas below or from the list of core courses listed above:		6
<i>Global Trade and Business</i>		
MKTG 5553	International Marketing Strategy	
AGEC 5343	International Agricultural Markets and Trade	
MGMT 5743	Intl Negotiations	
ECON 5603	Global Economics	
FIN 5213	International Business Finance	
EEE 5403	Social Entrepreneurship	
GS 5020	Independent Study	
GS 5070	Special Topics in Global Studies	
Other courses as approved by Director of MSGS program		
<i>Public Diplomacy and Global Communication</i>		
MC 5253	International Mass Communication	
GS 5043	Politics of the Global Economy	
GS 5223	Culture, History and World Systems	
SOC 5333	Global Population and Social Problems	
POLS 5673	Understanding and Responding to Terrorism	
POLS 5203	ProSeminar in International Relations	
AGCM 5503	Risk and Crisis Communication in Agricultural Sciences and Natural Resources	
GS 5020	Independent Study	

GS 5070	Special Topics in Global Studies	
Other courses as approved by Director of MSGS program		
<i>Global Leadership and Development</i>		
AGED 5703	Cultural Competency for Working in Agricultural and Extension Education	
ANTH 5243	Globalization and Culture	
GEOG 5233	Human Dimensions of Global Environmental Change	
MGMT 5093	Management of Nonprofit Organizations	
NSCI 5553	Global Nutrition and Food Security	
SCFD 6023	Comparative Education	
EEE 5403	Social Entrepreneurship	
GS 5020	Independent Study	
GS 5070	Special Topics in Global Studies	
Other courses as approved by Director of MSGS program		
<i>Global Disaster and Crisis Management</i>		
POLS 5673	Understanding and Responding to Terrorism	
FEMP 6313	Comparative and International Dimensions of Emergency Management	
FEMP 6303	Populations at Risk	
FEMP 5223	Preparedness and Planning	
AGCM 5503	Risk and Crisis Communication in Agricultural Sciences and Natural Resources	
SOC 6493	Sociology of Disaster	
NSCI 5553	Global Nutrition and Food Security	
GEOG 5233	Human Dimensions of Global Environmental Change	
GS 5020	Independent Study	
GS 5070	Special Topics in Global Studies	
Other courses as approved by Director of MSGS program		
Hours Subtotal		6
Total Hours		15

Graduate College Certificate Requirements

Learn more about Graduate College 2021-2022 Graduate Certificate Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Grassland Management, GCRT

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 12

Code	Title	Hours
Required Courses		
NREM 5713	Grassland Fire Ecology	3
NREM 5692	Grassland Monitoring and Assessment.	2
NREM 5682	Grassld Plant Identification	2
Hours Subtotal		7
Elective Courses		
Select 5 hours from the following:		5
NREM 5693	Principles of Forage Quality and Evaluation to Ruminant	
NREM 5673	Rangeland Resources Watershed Management	
NREM 5033	Ecology of Invasive Species	
Hours Subtotal		5
Total Hours		12

Graduate College Certificate Requirements

Learn more about Graduate College 2021-2022 Graduate Certificate Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Health Analytics, GCRT

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 12

Code	Title	Hours
Required Courses		
HCA 5013	Survey of Health Care Administration	3
MSIS 5673	Descriptive Analytics and Visualization	3
MSIS 5633	Predictive Analytics Technologies	3
Hours Subtotal		9
Electives		
Select 3 hours from the following:		3
MSIS 5303	Prescriptive Analytics	
MSIS 5223	Programming for Data Science and Analytics II	
MSIS 5663	Data Warehousing	
MSIS 5683	Big Data Advanced Analytics Technologies	
Hours Subtotal		3
Total Hours		12

Graduate College Certificate Requirements

Learn more about Graduate College 2021-2022 Graduate Certificate Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Health Care Administration, GCRT

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 12

Code	Title	Hours
HCA 5013	Survey of Health Care Administration	3
HCA 5123	Survey of Research and Evaluation in Health Care	3
HCA 5033	Legal Issues in Health Care Administration	3
HCA 5063	Health Care Compliance	3
Total Hours		12

Graduate College Certificate Requirements

Learn more about Graduate College 2021-2022 Graduate Certificate Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Health Care Administration: Finance, GCRT

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 12

Code	Title	Hours
HCA 5083	The Financial Structure of Health Care Organizations	3
HCA 5213	Advanced Cases in Healthcare Finance	3
HCA 5163	Healthcare Accounting and Auditing	3
HCA 5063	Health Care Compliance	3
Total Hours		12

Graduate College Certificate Requirements

Learn more about Graduate College 2021-2022 Graduate Certificate Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Health Care Administration: Global Health, GCRT

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 12

Code	Title	Hours
HCA 5103	Introduction to Global Health	3
HCA 5143	Relief and Development in Global Health	3
HCA 5153	International Health Systems	3
HCA 5173	Emerging Global Infectious Diseases	3
Total Hours		12

Graduate College Certificate Requirements

Learn more about Graduate College 2021-2022 Graduate Certificate Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Hidden Student Populations, GCRT

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 12

Code	Title	Hours
Required Courses		
HESA 5333	Introduction to Hidden Student Populations	3
HESA 5433	Practicum in Hidden Student Populations	3
Guided Electives		
Select 6 hours from the following: ¹		6
HESA 5340	Hidden Student Populations (Group of one-hour courses, each with a focus on a specific hidden population - up to 6 credit hours)	
HESA 5213	Student Development Theory	
SCFD 6983	Diversity and Equity Issues in Education	
SCFD 5873	Culture, Society and Education	
SCFD 5990	Problems and Issues in Social Foundations	
SCFD 6990	Seminar in Social Foundations	
EPSY 5103	Human Development in Psychology	
EPSY 5463	Psychology of Learning	
EDLE 6633	School Leadership and Community Collaboration	
WAED 5013	Characteristics of Adult Learners	
WAED 5203	Foundations of Adult and Continuing Education	
SPED 5633	Behavior Characteristics of Exceptional Individuals	
SPED 5993	Culturally Responsive Teaching in Special Education	
CIED 5623	Multicultural and Diversity Issues in Curriculum	
HDFS 5223	Resilience in Individuals and Families	
HDFS 5253	Theory and Research: Social and Emotional Development	
HDFS 5293	Human Development Theory	
HDFS 5543	Family Crisis and Trauma	
HDFS 5573	Adolescent in Family Context	
HDFS 5673	Family Dynamics of Addiction	
HDFS 5753	Leadership and Management of Community Service Programs	
Total Hours		12

Graduate College Certificate Requirements

Learn more about Graduate College 2021-2022 Graduate Certificate Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

¹ Students select interdisciplinary electives in areas across campus through consultation with their advisor and with consideration of their individual interests and leadership in their current and future educational spaces. Electives may come from the pre-approved list or submitted for faculty review and approval.

Human Resource Management, GCRT

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 15

Code	Title	Hours
Required Courses		
MGMT 5133	Total Rewards	3
MGMT 5153	Talent Development	3
MGMT 5823	Talent Acquisition	3
MGMT 5543	Human Resource Analytics	3
LSB 5423	Employment Law	3
Total Hours		15

Graduate College Certificate Requirements

Learn more about Graduate College 2021-2022 Graduate Certificate Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Infant Mental Health, GCRT

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 15

Code	Title	Hours
Required Courses		
HDFS 5233	Infant Mental Health	3
HDFS 5243	Infant and Early Childhood Development and Attachment	3
HDFS 5193	Reflective Practice	3
HDFS 5343	Developmental Assessment and Interventions	3
HDFS 5513	Issues in Family Science	3
Total Hours		15

Graduate College Certificate Requirements

Learn more about Graduate College 2021-2022 Graduate Certificate Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Information Assurance, GCRT

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 12

Code	Title	Hours
Required Courses		
MSIS 5203	Advanced Infrastructure Development	3
MSIS 5213	Information Assurance Management	3
Select 6 hours of the following:		6
MSIS 5233	Applied Information Systems Security	
MSIS 5253	Advanced System Certification and Accreditation	
MSIS 5273	Legal and Ethical Issues in Information Technology	
MSIS 5713	Scripting Essentials	
Total Hours		12

Graduate College Certificate Requirements

Learn more about Graduate College 2021-2022 Graduate Certificate Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Integrative Design of Building Envelope, GCRT

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 12

Code	Title	Hours
Degree Core		
ARCH 5003	Integrative Design	3
Hours Subtotal		3
Electives		
Select 9 hours of the following:		9
ARCH 5023	Masonry Design and Analysis	
ARCH 5093	Real Estate Development	
ARCH 5100	Special Topics in Architecture	
ARCH 5133	Advanced Energy Issues in Architecture	
ARCH 5263	Advanced Architecture Technology Seminar	
ARCH 5493	Entrepreneurship and Architecture	
ARCH 6243	Structures: Analysis III	
ARCH 6343	Structures: Steel III	
ARCH 6543	Structures: Concrete III	
CIVE 5113	Construction Business Management	
CIVE 5183	Construction Estimating	
CIVE 5193	BIM for Constructions	
CIVE 5273	Concrete Durability	
CIVE 5583	Advanced Construction Materials	
CIVE 5873	Air Pollution Control Engineering	
FSEP 5033	Risk Analysis	
FSEP 5113	Fire and Explosion Hazard Recognition	
FSEP 5133	Principles of Industrial and Process Safety	
FSEP 5143	Structural Design for Fire and Life Safety	
FSEP 5163	Building Electrical Systems	
FRNS 5103	The Chemistry of Pyrotechnics	
FRNS 5112		
FRNS 5123	Fire Dynamics in Forensic Investigations	
MSE 5013	Advanced Thermodynamics of Materials	
MSE 5023	Diffusion and Kinetics	
MSE 5033	Composite Materials	
MSE 5053	Smart Materials	
MSE 5093	Fundamentals of Materials Science	
MSE 5174	Fundamentals of Photovoltaics	
MSE 5223	Additive Manufacturing: Materials, Methods and Applications	
Other courses approved by advisor.		
Hours Subtotal		9
Total Hours		12

Graduate College Certificate Requirements

Learn more about Graduate College 2021-2022 Graduate Certificate Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Interdisciplinary Toxicology, GCRT

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 12

Code	Title	Hours
Courses		
Select 12 hours from at least two different participating departments/colleges:		12
<i>Biomedical Sciences</i>		
BIOM 6543 or ITOX 6543	Environmental Toxins in the Brain Environmental Toxins of the Brain	
<i>Biochemistry and Molecular Biology</i>		
BIOC 6820 or ITOX 6820	Selected Topics in Biochemistry Selected Topics in Biochemistry	
<i>Forensic Sciences</i>		
FRNS 5523 or ITOX 5523	Forensic Toxicology Forensic Toxicology	
FRNS 5282 or ITOX 5282	Methods in Forensic Sciences Methods of Forensic Science	
<i>Microbiology</i>		
MICR 5203 or ITOX 5203	Bioinformatics Bioinformatics	
<i>Comparative Biomedical Sciences</i>		
CBSC 5103 or ITOX 5103	Biochemical and Molecular Toxicology Biochemical and Molecular Toxicology	
CBSC 6213 or ITOX 6213	Toxicology: From Molecules to Ecosystems Toxicology: From Molecules to Ecosystems	
CBSC 6223 or ITOX 6223	Xenobiotic Disposition Xenobiotic Disposition	
CBSC 5801 or ITOX 5801	Nonclinical Drug Development Nonclinical Drug Development	
CBSC 5802 or ITOX 5802	Experimental Principles and Approaches Experimental Principles and Approaches	
CBSC 5902 or ITOX 5902	Toxicology of Chemical Warfare and Chemical Terrorism Toxicology of Chemical Warfare and Chemical Terrorism	
<i>Integrative Biology</i>		
BIOL 5303 or ITOX 5303	Organismal Ecotoxicology Organismal Ecotoxicology	
BIOL 5363 or ITOX 5363	Principles of Toxicology Principles of Toxicology	
BIOL 5343 or ITOX 5343	Population and Community Ecotoxicology Population and Community Toxicology	
BIOL 5423 or ITOX 5423	Techniques in Environmental Toxicology Techniques in Environmental Toxicology	
Hours Subtotal		12

Graduate College Certificate Requirements

Learn more about Graduate College 2021-2022 Graduate Certificate Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

International Disaster and Emergency Management, GCRT

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 18

Code	Title	Hours
Global Studies Core Requirements		
GS 5513	Global Crisis Management	3
GS 5013	Contemporary Issues in Global Studies	3
or GS 5110	Internship in Global Studies	
or GS 5200	Study Abroad	
Fire and Emergency Management Program Core Requirements		
FEMP 5623	Emergency Management in the International Setting	3
FEMP 6313	Comparative and International Dimensions of Emergency Management	3
Electives		
Select two courses and six credit hours minimum from the following:		6
AGCM 5503	Risk and Crisis Communication in Agricultural Sciences and Natural Resources	
FEMP 5213	Disaster Response	
FEMP 5223	Preparedness and Planning	
FEMP 6303	Populations at Risk	
GS 5020	Independent Study	
GS 5070	Special Topics in Global Studies	
GS 5200	Study Abroad	
GS 5413	Global Development	
GS 5523	Transnational Criminal Organizations and the War on Drugs	
GS 5533	Complex Emergencies	
MGMT 5163	Fundraising for Nonprofit Organizations	
Total Hours		18

Graduate College Certificate Requirements

Learn more about Graduate College 2021-2022 Graduate Certificate Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

K-12 STEM Educator, GCRT

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 12

Code	Title	Hours
Required Courses		
SMED 5050	Seminar in Integrated Mathematics and Science Applications	3
SMED 5313	Introduction to K-12 Engineering Education	3
SMED 5323	Technology for the K-12 STEM Educator	3
SMED 5333	Developing Informal and Formal STEM Programs in Schools	3
These 12 hours could also be used to satisfy specialization coursework for the MS in Teaching, Learning, and Leadership with an option in Mathematics/Science Education degree.		
Total Hours		12

Graduate College Certificate Requirements

Learn more about Graduate College 2021-2022 Graduate Certificate Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Marketing Analytics, GCRT

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 12

Code	Title	Hours
Required Courses		
MKTG 5733	Introduction to Marketing Analytics	3
MKTG 5743	Advanced Marketing Analytics	3
Hours Subtotal		6
Electives		
Select 6 hours from the following:		6
BAN 5511	Web Analytics and Digital Marketing	
BAN 5521	GIS Applications in Marketing Analytics	
BAN 5551	Optimization Applications in Marketing Analytics	
BAN 5561	Customer Lifetime Value Models in Marketing	
BAN 5563	Strategic Marketing and Business Analytics	
MKTG 5243	Base SAS Programming for Database Marketing	
MSIS 5633	Predictive Analytics Technologies	
MSIS 5303	Prescriptive Analytics	
Other graduate courses as approved by the program director		
Hours Subtotal		6
Total Hours		12

Graduate College Certificate Requirements

Learn more about Graduate College 2021-2022 Graduate Certificate Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Medical Sciences, GCRT

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 19

Code	Title	Hours
Required Courses		
BIOM 5122	Introduction and Survey of Human Structure	2
BIOM 5215	Medical Biochemistry	5
BIOM 5316	Medical Microbiology and Immunology	6
BIOM 5616	Graduate Biomedical Physiology	6
Total Hours		19

Graduate College Certificate Requirements

Learn more about Graduate College 2021-2022 Graduate Certificate Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Museum and Curatorial Studies, GCRT

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 15

Code	Title	Hours
Core Courses		
HIST 5053	Museum Studies	3
ART 5810 or HIST 5030	Museum Studies Internship Public History Internship	3
Hours Subtotal		6
Guided Electives		
Select 6 hours of the following: ¹		6
HIST 5033	Introduction to Public History	
HIST 5063	Historic Preservation	
HIST 5073	Digital Methods in History	
ART 5813	Museum Exhibition	
ART 5723	History of Museums and Collecting	
ART 5733	Museum Education	
Hours Subtotal		6
General Electives		
Select 3 hours of graduate-level electives: ²		3
Hours Subtotal		3
Total Hours		15

¹ Students must choose one HIST class and one ART class.

² May include additional hours of internship. May include History, Art History, Business Administration, Education, Zoology, among others, and are subject to the approval of the program coordinator.

Graduate College Certificate Requirements

Learn more about Graduate College 2021-2022 Graduate Certificate Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Neuroscience, GCRT

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 12

Code	Title	Hours
Core Courses		
HHP 5063	Neuroanatomy	3
or BIOM 5993	Principles of Neuroanatomy	
PSYC 5073	Principles of Neuroscience	3
or BIOL 5073	Principles of Neuroscience	
or BIOM 5983	Principles of Neuroscience	
Electives		
Select six hours from the following (select from appropriate section):		6
<i>Stillwater and/or Tulsa offerings</i>		
BIOL 5293	Behavioral Neuroendocrinology	
CHEM 6303	Physical Organic Chemistry	
ECEN 5783	Medical Imaging	
HDFS 5213	Lifespan Development	
HDFS 5283	Developmental Disabilities	
HHP 5923	Readings in Neurophysiology	
HHP 5823	Applied Neuromuscular Anatomy and Physiology	
PSYC 5823	Cognitive Processes	
PSYC 6483	Neurobiological Psychology	
PSYC 6583	Developmental Psychobiology	
<i>CHS/Tulsa offerings</i>		
BIOM 6513	Neuropharmacology	
BIOM 6972	Role of Nicotinic Acetylcholine Receptors in Neuropsychiatric Disorders	
BIOM 6543	Environmental Toxins in the Brain	
BIOM 6583	Neuroinflammation	
BIOM 6663	Neuroethology	
BIOM 6010	Topics in Biomedical Sciences	
BIOM 6183	Cellular and Molecular Biology of Pain	
Total Hours		12

Graduate College Certificate Requirements

Learn more about Graduate College 2021-2022 Graduate Certificate Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Non-Profit Management, GCRT

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 12

Code	Title	Hours
Required Courses		
MGMT 5093	Management of Nonprofit Organizations	3
MGMT 5163	Fundraising for Nonprofit Organizations	3
Hours Subtotal		6
Electives		
Select 6 hours from the following:		6
MGMT 5031	Leading Organizational Change	
MGMT 5051	Creating Ethical Work Places	
MGMT 5061	Managing Confrontations	
MGMT 5083	Corporate and Social Responsibility	
MGMT 5533	Leadership Challenges	
MGMT 5563	Crisis in Organizations	
MGMT 5713	Negotiation and Third-Party Dispute Resolution	
EEE 5403	Social Entrepreneurship	
EEE 5603	Entrepreneurship Empowerment in South Africa	
Hours Subtotal		6
Total Hours		12

Graduate College Certificate Requirements

Learn more about Graduate College 2021-2022 Graduate Certificate Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Online Teaching, GCRT

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 12

Code	Title	Hours
Required Courses		
EDTC 5103	Advanced Computing Applications in Education	3
EDTC 5153	Computer-Based Instruction Development	3
OCED 5673	Principles and Practices of Distance Education	3
EDTC 5720	Educ Workshop	3
Hours Subtotal		12
Total Hours		12

Graduate College Certificate Requirements

Learn more about Graduate College 2021-2022 Graduate Certificate Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Program Evaluation, GCRT

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 12

Code	Title	Hours
Required Courses		
REMS 5013	Research Design and Methodology	3
REMS 6373	Program Evaluation	3
REMS 6383	Program Evaluation II	3
Select 3 hours from the following:		3
SCFD 5913	Introduction to Qualitative Inquiry	
SCFD 6123	Qualitative Research I	
Similar courses from related disciplines will be considered as recommended by the student's advisory committee.		
Hours Subtotal		12
Total Hours		12

Graduate College Certificate Requirements

Learn more about Graduate College 2021-2022 Graduate Certificate Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Public Health in Rural and Underserved Communities, GCRT

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 15

Code	Title	Hours
Required Courses		
REMS 5953	Statistical Methods in Education	3
HLTH 5323	General Epidemiology	3
HLTH 5133	Environmental Health	3
HCA 5013	Survey of Health Care Administration	3
MPH 5653	Foundations of Public Health Education and Promotion	3
Total Hours		15

Graduate College Certificate Requirements

Learn more about Graduate College 2021-2022 Graduate Certificate Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Recreation and Leisure Management, GCRT

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 12

Code	Title	Hours
<i>Required course:</i>		
LEIS 5453	Recreation Management and Recreational Therapy Experiential Learning Lab	3
<i>Choose one course from each group:</i>		
<i>Elective course A</i>		
Select one course:		3
LEIS 5030	Field Problems in Recreation Management	
LEIS 5423	Supervision of Recreation Management People and Programs	
<i>Elective course B</i>		
Select one course:		3
LEIS 5403	Outdoor Recreation	
RMRT 4463	Areas and Facilities In Recreation Management	
RMRT 4713	Campus Recreation, Intramurals, and Sport	
<i>Elective course C</i>		
Select one course:		3
LEIS 5020	Workshop in Recreation Management	
LEIS 5020	Workshop in Recreation Management (Recreation and Technology)	
LEIS 5023	Legal Aspects of Health, Physical Education and Leisure Services	
LEIS 5030	Field Problems in Recreation Management (Recreation Specialization)	
LEIS 5413	Organization and Administration of Recreation and Leisure Services	
RMRT 4943	Grant Writing and Nonprofit Management	
Total Hours		12

Graduate College Certificate Requirements

Learn more about Graduate College 2021-2022 Graduate Certificate Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

School Library Certification, GCRT

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 18

Code	Title	Hours
Required Courses		
LBSC 5113	Selection and Organization of Informational and Educational Resources	3
LBSC 5613	Library Networks and Databases	3
LBSC 5823	Administration of School Library Media and Technology Programs	3
CIED 5353	Literature for Children, Adolescents and Adults	3
CIED 5443	Teaching Reading with Literature	3
EDTC 5103	Advanced Computing Applications in Education	3
Total Hours		18

Graduate College Certificate Requirements

Learn more about Graduate College 2021-2022 Graduate Certificate Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Special Education, GCRT

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 18

Code	Title	Hours
Select six courses from the following:		
SPED 5623	Characteristics of Students with Mild/Moderate Disabilities	18
SPED 5743	Planning, Compliance and Current Practices	
SPED 5883	Classroom and Behavior Management	
SPED 5673	Improving Literacy Skills of Individuals with Disabilities	
SPED 5993	Culturally Responsive Teaching in Special Education	
SPED 5783	Assessing Students with Disabilities	
SPED 4723	Transition Into Adulthood for Individuals with Disabilities	
Total Hours		18

Admission Requirements

Admission to the 18-hour Special Education Graduate Certificate Program will require the following:

- Successful completion of a bachelor's degree with a transcript documenting 3.0 or higher GPA in a Bachelors degree from an accredited institution
- A written Statement of Goals
- A resume/vita
- Passing score on the OGET
- A 3.00 GPA on graduate work completed before applying to the OSU SPED program

An applicant who does not meet criteria for admission can be considered for provisional/probational admission. Provisional admission will constitute that applicants may be accepted on a provisional admission, potentially requiring candidates to take additional coursework/leveling courses as a prerequisite to the listed graduate certificate courses. Candidates admitted on a provisional basis will be reviewed for full admission pending completion of prerequisite coursework, earning a minimum of a "B" grade in all prerequisite coursework. Candidates admitted on a probational basis will be reviewed for full admission pending completion of initial graduate certificate coursework with an average 3.0 GPA.

Students may transfer up to 3 credit hours of graduate level special education coursework to the graduate certificate from an accredited college/university (if taken within 3 years prior to 18-hour graduate certificate application). The courses must have been completed with a letter grade of a "B" or better. All transfer credits must be approved by the student's advisor and/or special education program coordinator.

Retention in the program requires students to maintain the Graduate College's requirement of a GPA of 3.0 to maintain good standing (see http://gradcollege.okstate.edu/current_student/academic_progress.html (<https://nam04.safelinks.protection.outlook.com/?url=http>

http://gradcollege.okstate.edu/current_student/academic_progress.html&data=02%7C01%7Cjeff.packham%40okstate.edu%7C07b161783a5043af181708d7a394db20%7C2a69c91de8494e34a230cdf8b27e1%2B0nCyscez8rReg7o0Gg%3D&reserved=0)).

Completion of the Graduate Certificate in Special Education requires completion of the coursework in good standing (GPA of B, or 3.0).

Graduate College Certificate Requirements

Learn more about Graduate College 2021-2022 Graduate Certificate Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Sport Communication, GCRT

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 15

Code	Title	Hours
Required Courses		
MC 5733	Responsibility in Mass Communication	3
MC 5873		3
Hours Subtotal		6
Electives		
Select 9 hours from the following:		9
MC 5253	International Mass Communication	
MC 5163	Mass Communication Law	
MC 5143	Diversity In Sports Media	
MC 5560	Specialized Sports Media Applications	
MC 5020	Advanced Practicum or Internship in Mass Communication	
MC 5113	Methods of Research in Mass Communication	
Hours Subtotal		9
Total Hours		15

Graduate College Certificate Requirements

Learn more about Graduate College 2021-2022 Graduate Certificate Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Statistical Methods and Analyses in Educational and Behavioral Sciences, GCRT

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 12

Code	Title	Hours
Required Courses		
REMS 6003	Analyses of Variance	3
REMS 6013	Multiple Regression Analysis in Behavioral Studies	3
REMS 6663	Applied Multivariate Research in Behavioral Studies	3
REMS 6683 or REMS 6693	Multilevel Modeling Methods in Education Structural Equation Modeling for Behavioral and Educational Research	3
Total Hours		12

Graduate College Certificate Requirements

Learn more about Graduate College 2021-2022 Graduate Certificate Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Substance Abuse Counseling, GCRT

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 18

Code	Title	Hours
Required Core		
CPSY 5673	Substance Abuse Counseling	3
CPSY 5773	Substance Abuse Counseling Theories	3
CPSY 5783	Substance Abuse Psychopharmacology	3
HDFS 5673	Family Dynamics of Addiction	3
HDFS 5683	Spirituality and Aging	3
CPSY 5793	Substance Abuse Counseling Internship	3
Total Hours		18

Graduate College Certificate Requirements

Learn more about Graduate College 2021-2022 Graduate Certificate Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Supply Chain and Logistics, GCRT

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 12

Code	Title	Hours
Required Courses		
IEM 5763	Supply Chain Strategy	3
IEM 5613	Integrated Manufacturing Control Systems	3
IEM 5633	Advanced Production and Inventory Control	3
IEM 5203	Facility Location, Warehousing and Transportation	3
Total Hours		12

Graduate College Certificate Requirements

Learn more about Graduate College 2021-2022 Graduate Certificate Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Teaching English to Speakers of Other Languages, GCRT

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 12

Code	Title	Hours
Required Courses		
ENGL 5130	Studies in English Grammar	3
ENGL 5243	Teaching English as a Second Language	3
ENGL 5333	Second Language Assessment	3
Hours Subtotal		9
Sample Elective Courses		
Select 3 hours from the following:		3
ENGL 5120	Studies in Teaching English as a Second Language	
ENGL 5123	Approaches to Language Acquisition	
ENGL 5143	Descriptive Linguistics	
Hours Subtotal		3
Total Hours		12

Other Requirements

- Minimum of 12 credit hours, with three required courses and one elective course chosen from a group of courses offered by the English Department.
- No more than 9 hours of coursework taken as a non-degree seeking student.

Graduate College Certificate Requirements

Learn more about Graduate College 2021-2022 Graduate Certificate Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Workforce and Adult Education, GCRT

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 12

Code	Title	Hours
Required Courses		
WAED 5013	Characteristics of Adult Learners	3
WAED 5153	Curriculum Planning in Workforce and Adult Education	3
WAED 5353	Instructional Strategies for Adults	3
Select 3 hours from the following:		3
WAED 5123	Evaluation of Workforce and Adult Education Programs and Instruction	
WAED 5143	Organization and Administration of Adult Education	
WAED 5203	Foundations of Adult and Continuing Education	
WAED 5313	History, Principles, and Organization of Workforce Education	
Hours Subtotal		12
Total Hours		12

Graduate College Certificate Requirements

Learn more about Graduate College 2021-2022 Graduate Certificate Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Master's Degree Programs

- Accounting: Corporate Finance, MS (p. 2947)
- Accounting: Data Analytics and Systems, MS (p. 2948)
- Accounting: Financial Reporting and Auditing, MS (p. 2949)
- Aging Studies, MS (p. 2950)
- Agricultural Communications, MS (p. 2951)
- Agricultural Economics, MS (p. 2952)
- Agricultural Education and Leadership, MS (p. 2953)
- Animal Science, MS (p. 2954)
- Applied Statistics, MS (p. 2955)
- Art History, MA (p. 2956)
- Athletic Training, MAT (p. 2957)
- Aviation and Space, MS (p. 2958)
- Biochemistry and Molecular Biology, MS (p. 2959)
- Biomedical Sciences, MS (p. 2960)
- Biosystems Engineering, MS (p. 2963)
- Business Administration, MBA (p. 2964)
- Business Administration: Accounting, MBA (p. 2966)
- Business Administration: Business Sustainability, MBA (p. 2967)
- Business Administration: Data Science, MBA (p. 2968)
- Business Administration: Economics, MBA (p. 2969)
- Business Administration: Energy Business, MBA (p. 2970)
- Business Administration: Entrepreneurship, MBA (p. 2971)
- Business Administration: Finance Investment Banking, MBA (p. 2972)
- Business Administration: Global Marketing, MBA (p. 2973)
- Business Administration: Hospitality and Tourism Management, MBA (p. 2974)
- Business Administration: Human Resource Management, MBA (p. 2975)
- Business Administration: Information Assurance, MBA (p. 2976)
- Business Administration: Marketing Analytics, MBA (p. 2977)
- Business Administration: Nonprofit Management, MBA (p. 2978)
- Business Analytics and Data Science, MS (p. 2979)
- Business Analytics and Data Science: Advanced Data Science, MS (p. 2980)
- Business Analytics and Data Science: Cybersecurity Analytics, MS (p. 2981)
- Business Analytics and Data Science: Health Analytics, MS (p. 2982)
- Business Analytics and Data Science: Marketing Analytics, MS (p. 2983)
- Chemical Engineering, MS (p. 2984)
- Chemistry, MS (p. 2985)
- Civil Engineering, MS (p. 2986)
- Communication Sciences and Disorders, MS (p. 2987)
- Comparative Biomedical Science, MS (p. 3135)
- Computer Science, MS (p. 2988)
- Counseling: Mental Health Counseling, MS (p. 2989)
- Counseling: School Counseling, MS (p. 2991)
- Design, Housing and Merchandising: Apparel Design and Production, MS (p. 2993)
- Design, Housing and Merchandising: Interior Design, MS (p. 2994)
- Design, Housing and Merchandising: Merchandising, MS (p. 2995)
- Dietetics, MS (p. 2996)
- Economics, MS (p. 2997)
- Educational Leadership Studies: College Student Development, MS (p. 2998)
- Educational Leadership Studies: Higher Education, MS (p. 2999)
- Educational Leadership Studies: School Administration, MS (p. 3000)
- Educational Psychology, MS (p. 3001)
- Educational Psychology: Educational Psychology, MS (p. 3002)
- Educational Psychology: Research, Evaluation, Measurement and Statistics, MS (p. 3003)
- Educational Psychology: School Psychometrics, MS (p. 3004)
- Educational Technology: Educational Technology, MS (p. 3005)
- Educational Technology: School Library Media, MS (p. 3006)
- Electrical Engineering, MEN (p. 3007)
- Electrical Engineering, MS (p. 3008)
- Engineering and Technology Management, MS (p. 3009)
- Engineering Technology: Fire Safety and Explosion Protection, MS (p. 3010)
- Engineering Technology: Mechatronics and Robotics, MS (p. 3012)
- English, MA (p. 3014)
- English: Creative Writing, MFA (p. 3015)
- English: Professional Writing, MA (p. 3016)
- English: Teaching English to Speakers of Other Languages, MA (p. 3018)
- Entomology and Plant Pathology: Entomology, MS (p. 3019)
- Entomology and Plant Pathology: Plant Pathology, MS (p. 3020)
- Entrepreneurship, MS (p. 3021)
- Environmental Science, MS (p. 3022)
- Environmental Science: Environmental Management Professional Science Masters, MS (p. 3023)
- Family and Community Services, MS (p. 3024)
- Family and Consumer Sciences Education, MS (p. 3025)
- Family Financial Planning, MS (p. 3026)
- Fire and Emergency Management Administration, MS (p. 3027)
- Food Science, MS (p. 3029)
- Forensic Sciences, MS (p. 3030)
- Forensic Sciences: Arson, Explosives, Firearms and Toolmarks Investigation, MS (p. 3032)
- Forensic Sciences: Forensic Document Examination, MS (p. 3033)
- Forensic Sciences: Forensic Science Administration, MS (p. 3034)
- General Agriculture: Agribusiness, MAG (p. 3035)
- General Agriculture: Agriculture Leadership, MAG (p. 3036)
- Geography, MS (p. 3037)
- Geology, MS (p. 3038)
- Global Health, MS (p. 3040)
- Global Studies, MS (p. 3041)
- Graphic Design, MFA (p. 3042)
- Health and Human Performance: Applied Exercise Science, MS (p. 3043)
- Health and Human Performance: Health Promotion, MS (p. 3044)
- Health and Human Performance: Physical Education, MS (p. 3045)
- Health Care Administration, MS (p. 3046)

- History, MA (p. 3047)
- Horticulture, MS (p. 3048)
- Hospitality and Tourism Management, MS (p. 3049)
- Human Development and Family Science: Applied Human Services, MS (p. 3051)
- Human Development and Family Science: Developmental and Family Sciences, MS (p. 3052)
- Human Development and Family Science: Early Childhood Education, MS (p. 3053)
- Human Development and Family Science: Family and Community Services, MS (p. 3054)
- Human Development and Family Science: Gerontology (Internet-Based Program), MS (p. 3055)
- Human Development and Family Science: Gerontology (On Campus), MS (p. 3056)
- Human Development and Family Science: Marriage and Family Therapy, MS (p. 3057)
- Industrial Engineering and Management, MS (p. 3059)
- Industrial Engineering and Management: Operations Research and Analytics, MS (p. 3060)
- Industrial Engineering and Management: Supply Chain and Logistics, MS (p. 3061)
- Integrative Biology, MS (p. 3062)
- Interdisciplinary Studies, MS (p. 3063)
- International Agriculture, MAG (p. 3064)
- International Agriculture, MS (p. 3065)
- Leisure Studies, MS (p. 3067)
- Management Information Systems, MS (p. 3068)
- Management Information Systems: Big Data Analytics, MS (p. 3069)
- Management Information Systems: Cybersecurity, MS (p. 3070)
- Management Information Systems: Health Analytics, MS (p. 3071)
- Mass Communications, MS (p. 3072)
- Materials Science and Engineering, MS (p. 3074)
- Mathematics, MS (p. 3076)
- Mechanical and Aerospace Engineering, MEN (p. 3078)
- Mechanical and Aerospace Engineering, MS (p. 3079)
- Mechanical and Aerospace Engineering: Unmanned Aerial Systems, MS (p. 3080)
- Microbiology, Cell and Molecular Biology, MS (p. 3081)
- Music: Applied Music, MM (p. 3082)
- Music: Conducting, MM (p. 3083)
- Natural Resource Ecology and Management, MS (p. 3084)
- Natural Resource Ecology and Management: Fisheries and Aquatic Ecology, MS (p. 3085)
- Natural Resource Ecology and Management: Forest Resources, MS (p. 3086)
- Natural Resource Ecology and Management: Rangeland Ecology and Management, MS (p. 3087)
- Natural Resource Ecology and Management: Wildlife Ecology and Management, MS (p. 3088)
- Nutritional Sciences: Dietetics (Internet-Based Program), MS (p. 3089)
- Nutritional Sciences: Dietetics Research, MS (p. 3090)
- Nutritional Sciences: Nutrition, MS (p. 3092)
- Petroleum Engineering, MS (p. 3094)
- Philosophy, MA (p. 3095)
- Physician Assistant Studies, MS (p. 3096)
- Physics, MS (p. 3097)
- Physics: Optics and Photonics, MS (p. 3098)
- Plant and Soil Sciences, MS (p. 3099)
- Plant Biology, MS (p. 3100)
- Political Science, MA (p. 3101)
- Public Health: Rural and Underserved Populations, MPH (p. 3102)
- Quantitative Finance, MS (p. 3104)
- Social Foundations of Education, MA (p. 3105)
- Sociology, MS (p. 3106)
- Statistics, MS (p. 3108)
- Teaching: Elementary, MATT (p. 3117)
- Teaching: Secondary Mathematics, MATT (p. 3118)
- Teaching: Secondary Science, MATT (p. 3119)
- Teaching, Learning and Leadership: Curriculum and Leadership Studies, MS (p. 3109)
- Teaching, Learning and Leadership: Gifted and Talented Education, MS (p. 3110)
- Teaching, Learning and Leadership: K-12 Ed, MS (p. 3111)
- Teaching, Learning and Leadership: Mathematics/Science Education, MS (p. 3113)
- Teaching, Learning and Leadership: Reading and Literacy, MS (p. 3114)
- Teaching, Learning and Leadership: Special Education, MS (p. 3115)
- Teaching, Learning and Leadership: Workforce and Adult Education, MS (p. 3116)
- Theatre, MA (p. 3120)

Accounting: Corporate Finance, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 33

Code	Title	Hours
Core		
<i>Summer</i>		
ACCT 5093	Reimagine: Innovative Accounting and Analytics Mindset ¹	3
MSIS 5393	Advanced Spreadsheet Modeling ²	3
<i>Fall</i>		
ACCT 5003	Advanced Federal Income Taxation	3
ACCT 5103	Seminar in Contemporary Accounting Theory I	3
ACCT 5113	Financial Accounting Research	3
<i>Spring</i>		
ACCT 5153	Financial Statement Analysis	3
Hours Subtotal		18
Options		
<i>Fall</i>		
FIN 5343	Valuation and Financial Modeling	3
<i>Spring</i>		
FIN 5003 or FIN 5363	Introduction to Energy Business ² Energy Finance	3
FIN 5053	Theory and Practice of Financial Management ²	3
ACCT 5603	Advanced Accounting-based Information Systems	3
<i>Summer</i>		
Choose ACCT 5994 or 3-hour elective from list ³		3-4
ACCT 5994	CPA Review ^{3,4}	
Or select 3 hours from the list of electives. ³		
Electives		
ACCT 5133	Oil and Gas Accounting	
ACCT 5503	Advanced Auditing	
ACCT 5833	Graduate Internship in Accounting ⁵	
EEE 5233	Ideation, Creativity & Innovation	
FIN 5003	Introduction to Energy Business ²	
FIN 5363	Energy Finance ²	
MSIS 5253	Advanced System Certification and Accreditation ²	
MSIS 5303	Prescriptive Analytics ²	
MSIS 5600	Special Projects in Business Information Systems	
MSIS 5633	Predictive Analytics Technologies ²	
MSIS 5673	Descriptive Analytics and Visualization ²	
Select three hours from the following:		
ACCT 5723	Expanding Accounting Horizons in the US	
ACCT 5763	International Accounting Abroad	
Non-ACCT Travel Course		

Hours Subtotal	15-16
Total Hours	33

- ¹ Scholarships will be available to assist in covering the costs associated with travel for ACCT 5093.
- ² Offered online.
- ³ If ACCT 5994 is selected, total hours for degree increase by one hour.
- ⁴ Elective may be taken in spring or summer semester.
- ⁵ Summer offering only. Cannot received credit at both the undergraduate and graduate level.

Additional Requirements

- Other electives require approval from the MS Coordinator.
- Beginning with Summer 2020 the MS-Accounting program does not accommodate spring or fall internships although the department will work with individual students who have documented acceptance of an internship (as of September 15) to design alternatives.
- Students who have already taken ACCT 5003 for credit as ACCT 4033 or a course equivalent at another institution may substitute an elective for ACCT 5003. The elective must have an ACCT prefix if in the DAS of CF concentration.

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Accounting: Data Analytics & Systems, MS

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 33

Code	Title	Hours
Core		
<i>Summer</i>		
ACCT 5093	Reimagine: Innovative Accounting and Analytics Mindset ¹	3
MSIS 5393	Advanced Spreadsheet Modeling ²	3
<i>Fall</i>		
ACCT 5003	Advanced Federal Income Taxation	3
ACCT 5113	Financial Accounting Research	3
ACCT 5103	Seminar in Contemporary Accounting Theory I	3
<i>Spring</i>		
ACCT 5153	Financial Statement Analysis	3
Hours Subtotal		18
Options		
<i>Fall</i>		
MSIS 5633	Predictive Analytics Technologies ²	3
<i>Spring</i>		
MSIS 5303	Prescriptive Analytics ²	3
ACCT 5603	Advanced Accounting-based Information Systems	3
Select 3 hours from the list of electives below.		3
<i>Summer</i>		
Choose ACCT 5994 or 3-hour elective from list ³		3-4
ACCT 5994	CPA Review ^{3,4}	
Or select 3 hours from the list of electives. ³		
Electives		
ACCT 5133	Oil and Gas Accounting	
ACCT 5503	Advanced Auditing	
ACCT 5833	Graduate Internship in Accounting ⁴	
EEE 5233	Ideation, Creativity & Innovation	
FIN 5003	Introduction to Energy Business ²	
FIN 5053	Theory and Practice of Financial Management ²	
FIN 5363	Energy Finance ²	
FIN 5343	Valuation and Financial Modeling	
MSIS 5253	Advanced System Certification and Accreditation ²	
MSIS 5600	Special Projects in Business Information Systems	
MSIS 5673	Descriptive Analytics and Visualization ²	
Select three hours from the following:		
ACCT 5723	Expanding Accounting Horizons in the US	
ACCT 5763	International Accounting Abroad	
Non-ACCT Travel Course		

Hours Subtotal	15-16
Total Hours	33

- ¹ Scholarships will be available to assist in covering the costs associated with travel for ACCT 5093.
- ² Offered online.
- ³ If ACCT 5994 is selected, total hours for degree increase by one hour.
- ⁴ Elective may be taken in spring or summer semester.
- ⁵ Summer offering only. Cannot receive credit at both the undergraduate and graduate level.

Additional Requirements

- Other electives require approval from the MS Coordinator.
- Beginning with Summer 2020 the MS-Accounting program does not accommodate spring or fall internships although the department will work with individual students who have documented acceptance of an internship (as of September 15) to design alternatives.
- Students who have already taken ACCT 5003 for credit as ACCT 4033 or a course equivalent at another institution may substitute an elective for ACCT 5003. The elective must have an ACCT prefix if in the DAS of CF concentration.

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Accounting: Financial Reporting & Auditing, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 34

Code	Title	Hours
Core		
<i>Summer</i>		
ACCT 5093	Reimagine: Innovative Accounting and Analytics Mindset ¹	3
MSIS 5393	Advanced Spreadsheet Modeling ²	3
<i>Fall</i>		
ACCT 5003	Advanced Federal Income Taxation	3
ACCT 5103	Seminar in Contemporary Accounting Theory I	3
ACCT 5113	Financial Accounting Research	3
<i>Spring</i>		
ACCT 5153	Financial Statement Analysis	3
Hours Subtotal		18
Options		
<i>Fall</i>		
ACCT 5133	Oil and Gas Accounting	3
<i>Spring</i>		
ACCT 5503	Advanced Auditing	3
ACCT 5603	Advanced Accounting-based Information Systems	3
Select 3 hours from the list of electives below.		3
<i>Summer</i>		
ACCT 5994	CPA Review	4
Hours Subtotal		16
Electives		
ACCT 5133	Oil and Gas Accounting	
ACCT 5833	Graduate Internship in Accounting ³	
EEE 5233	Ideation, Creativity & Innovation	
FIN 5003	Introduction to Energy Business ²	
FIN 5053	Theory and Practice of Financial Management ²	
FIN 5363	Energy Finance ²	
FIN 5343	Valuation and Financial Modeling	
MSIS 5253	Advanced System Certification and Accreditation ²	
MSIS 5303	Prescriptive Analytics ²	
MSIS 5600	Special Projects in Business Information Systems	
MSIS 5633	Predictive Analytics Technologies ²	
MSIS 5673	Descriptive Analytics and Visualization ²	
Select three hours from the following:		
ACCT 5723	Expanding Accounting Horizons in the US	
ACCT 5763	International Accounting Abroad	
Non-ACCT Travel Course		

Hours Subtotal	0
Total Hours	34

¹ Scholarships will be available to assist in covering the costs associated with travel for ACCT 5093.

² Offered online.

³ Summer offering only. Cannot receive credit at both the undergraduate and graduate level.

Additional Requirements

- Other electives require approval from the MS Coordinator.
- Beginning with Summer 2020 the MS-Accounting program does not accommodate spring or fall internships although the department will work with individual students who have documented acceptance of an internship (as of September 15) to design alternatives.
- Students who have already taken ACCT 5003 for credit as ACCT 4033 or a course equivalent at another institution may substitute an elective for ACCT 5003. The elective must have an ACCT prefix if in the DAS of CF concentration.

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Aging Studies, MS

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 36

Code	Title	Hours
Core Courses		
HDFS 5413	Aging in Human Development	3
HDFS 5493	Aging and Diverse Families	3
HS 5533	Economics of Aging and Public Policy	3
HS 5543	Environments and Aging	3
NSCI 5323	Nutrition and Physical Activity in Aging	3
HDFS 5403	Perspectives in Gerontology	3
HDFS 5400	Professional Seminar in Gerontology	3
HS 5633	Program Evaluation and Research Methods in Gerontology	3
REMS 5953	Statistical Methods in Education	3
Guided Electives		
Choose two courses from the following:		6
HDFS 5110	Directed Study in HDFS	
HDFS 5313	Creativity and Aging	
HDFS 5433	Theories of Aging	
HDFS 5463	Biological Principles of Aging	
HDFS 5593	Sexuality & Aging	
HDFS 5683	Spirituality and Aging	
Creative Component		
HDFS 5163	Master's Capstone in HDFS	3
Total Hours		36

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Agricultural Communications, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 30

Code	Title	Hours
Core Requirements		
<i>Research and Seminar</i>		
AGCM 5000	Research and Thesis	6
<i>Research Methods</i>		
AECL 5983	Social Sciences Research in Agricultural Sciences and Natural Resources	3
<i>Statistics</i>		
REMS 5953	Statistical Methods in Education (or equivalent)	3
<i>Other Required Courses</i>		
AGCM 5103	History and Philosophical Foundations of Agricultural Communications	3
AGCM 5203	Theory and Practice in Agricultural Communications	3
AECL 5863 or AECL 6223	Methods of Technological Change Program Evaluation in Agriculture and Extension	3
<i>Graduate Orientation</i>		
AECL 5101	Orientation to Graduate Programs in Agricultural Education, Communications and Leadership	1
Hours Subtotal		22
Electives		
Select eight hours		8
With committee approval, electives may be chosen from technical agriculture, journalism, education or other areas; or a combination of areas which most effectively achieve the student's educational goals.		
Hours Subtotal		8
Total Hours		30

Formal Report Option

Total Hours: 32

Code	Title	Hours
Core Requirements		
<i>Research and Seminar</i>		
AGCM 5000	Research and Thesis	2
<i>Research Methods</i>		
AECL 5983	Social Sciences Research in Agricultural Sciences and Natural Resources	3
<i>Statistics</i>		
REMS 5953	Statistical Methods in Education	3
<i>Other Required Courses</i>		
AGCM 5103	History and Philosophical Foundations of Agricultural Communications	3

AGCM 5203	Theory and Practice in Agricultural Communications	3
AECL 5863 or AECL 6223	Methods of Technological Change Program Evaluation in Agriculture and Extension	3
<i>Graduate Orientation</i>		
AECL 5101	Orientation to Graduate Programs in Agricultural Education, Communications and Leadership	1
Hours Subtotal		18
Electives		
Select 14 hours		14
With committee approval, electives may be chosen from technical agriculture, journalism, education or other areas; or a combination of areas which most effectively achieve the student's educational goals.		
Hours Subtotal		14
Total Hours		32

Other Agricultural Communications Requirements

- Totals must include a minimum of 21 hours of 5000 or higher credit and a maximum of 9 transfer credit hours.

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Agricultural Economics, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 30

Code	Title	Hours
Core Requirements ¹		
AGEC 5101	Research Methodology	1
AGEC 5103	Mathematical Economics	3
AGEC 5403	Production Economics	3
Choose six hours from the following: ²		6
AGEC 5113	Applications of Mathematical Programming	
AGEC 5213	Econometric Methods	
STAT 5543	Applied Regression Analysis	
Choose six additional hours in Agricultural Economics at the 5000- or 6000-level (excluding AGECE 5000 and courses defined as mutually exclusive to 4000-level courses) with a minimum of 3 hours in marketing or prices.		6
Hours Subtotal		19
Electives ¹		
Select 11 hours of electives		11
<i>Suggested elective courses</i>		
AGEC 5203	Advanced Agricultural Prices	
AGEC 5233	Primary Data Analysis in Economic Research	
AGEC 5311	Agricultural Marketing: Concepts and Tools	
AGEC 5321	Agricultural Marketing and Economic Development	
AGEC 5331	Agricultural Marketing: Advanced Concepts	
AGEC 5503	Economics of Natural and Environmental Resource Policy	
AGEC 5603	Advanced Agricultural Finance	
AGEC 5723	Plan & Pol Devlpmnt	
AGEC 5733	Food Import Demand and Trade Policy	
ACCT 5113	Financial Accounting Research	
LSB 5163	Legal Environment of Business	
ECON 5033	Macroeconomic Analysis	
ECON 5603	Global Economics	
FIN 5223	Investment Theory and Strategy	
FIN 5763	Derivative Securities and the Management of Financial Price Risk	
Hours Subtotal		11
Total Hours		30

¹ A total of 21 credit hours at 5000- and 6000-level is required.

² These courses are preferred but ECON 6013 and ECON 6213 are allowed as substitutions.

Formal Report Option

Total Hours: 32

Code	Title	Hours
Core Requirements ¹		
AGEC 5101	Research Methodology	1
AGEC 5103	Mathematical Economics	3
AGEC 5403	Production Economics	3
Choose six hours from the following: ²		6
AGEC 5113	Applications of Mathematical Programming	
AGEC 5213	Econometric Methods	
STAT 5543	Applied Regression Analysis	
Choose six additional hours in Agricultural Economics at the 5000- or 6000-level (excluding AGECE 5000 and courses defined as mutually exclusive to 4000-level courses) with a minimum of 3 hours in marketing or prices.		6
Hours Subtotal		19
Electives ¹		
Select 11 hours of electives		11
<i>Suggested elective courses</i>		
AGEC 5203	Advanced Agricultural Prices	
AGEC 5233	Primary Data Analysis in Economic Research	
AGEC 5311	Agricultural Marketing: Concepts and Tools	
AGEC 5321	Agricultural Marketing and Economic Development	
AGEC 5331	Agricultural Marketing: Advanced Concepts	
AGEC 5503	Economics of Natural and Environmental Resource Policy	
AGEC 5603	Advanced Agricultural Finance	
AGEC 5723	Plan & Pol Devlpmnt	
AGEC 5733	Food Import Demand and Trade Policy	
ACCT 5113	Financial Accounting Research	
LSB 5163	Legal Environment of Business	
ECON 5033	Macroeconomic Analysis	
ECON 5603	Global Economics	
FIN 5223	Investment Theory and Strategy	
FIN 5763	Derivative Securities and the Management of Financial Price Risk	
Hours Subtotal		11
Formal Report		
Two hours		2
Hours Subtotal		2
Total Hours		32

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Agricultural Education and Leadership, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 30

Code	Title	Hours
Core Requirements		
<i>Research or Creative Component</i>		
AECL 5000	Master's Thesis/Report in Agricultural Education, Communications and Leadership	6
<i>Research Methods</i>		
AECL 5983	Social Sciences Research in Agricultural Sciences and Natural Resources	3
<i>Statistics</i>		
REMS 5953	Statistical Methods in Education (Or equivalent)	3
<i>Agricultural Education</i>		
Select six hours from the following:		6
AGED 5813	College Teaching of Agriculture and Natural Resources	
AGED 5823	Advanced Methods of Teaching Agriculture	
AECL 5863	Methods of Technological Change	
AGED 6103	History and Philosophical Foundations of Agricultural and Extension Education	
AECL 6223	Program Evaluation in Agriculture and Extension	
AGLE 5303	Foundations of Leadership Theory	
<i>Graduate Orientation</i>		
AECL 5101	Orientation to Graduate Programs in Agricultural Education, Communications and Leadership	1
Hours Subtotal		19
Electives		
Select 11 hours		11
Hours Subtotal		11
Total Hours		30

Formal Report Option

Total Hours: 32

Code	Title	Hours
Core Requirements		
<i>Research or Creative Component</i>		
AGED 5102	Creative Component in Agricultural Education	2
<i>Research Methods</i>		
AECL 5983	Social Sciences Research in Agricultural Sciences and Natural Resources	3

<i>Statistics</i>		
REMS 5953	Statistical Methods in Education (Or equivalent)	3
<i>Agricultural Education</i>		
Select 6 hours from the following:		6
AGED 5813	College Teaching of Agriculture and Natural Resources	
AGED 5823	Advanced Methods of Teaching Agriculture	
AECL 5863	Methods of Technological Change	
AGED 6103	History and Philosophical Foundations of Agricultural and Extension Education	
AECL 6223	Program Evaluation in Agriculture and Extension	
AGLE 5303	Foundations of Leadership Theory	
<i>Graduate Orientation</i>		
AECL 5101	Orientation to Graduate Programs in Agricultural Education, Communications and Leadership	1
Hours Subtotal		15
Electives		
Select 17 hours		17
Hours Subtotal		17
Total Hours		32

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Animal Science, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 30

Code	Title	Hours
Required Courses		
ANSI 5000	Master's Research and Thesis	6
ANSI 5010	Special Problems	6
ANSI 5110	Seminar	3
Hours Subtotal		15
Electives		
Select 15 hours of ANSI graduate courses with the approval of the advisory committee.		15
Hours Subtotal		15
Total Hours		30

Formal Report Option

Total Hours: 32

Code	Title	Hours
Required Courses		
ANSI 5000	Master's Research and Thesis	6
ANSI 5010	Special Problems	6
ANSI 5110	Seminar	3
Hours Subtotal		15
Electives		
Select 15 hours of ANSI graduate courses with the approval of the advisory committee.		15
Hours Subtotal		15
Research		
Two Hours		2
Hours Subtotal		2
Total Hours		32

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Applied Statistics, MS

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 32

Code	Title	Hours
Required Coursework		
STAT 4043	Applied Regression Analysis	3
STAT 4203	Mathematical Statistics I	3
STAT 4213	Mathematical Statistics II	3
STAT 5013	Statistics for Experimenters I	3
STAT 5023	Statistics for Experimenters II	3
STAT 5063	Statistical Machine Learning with R	3
STAT 5193	SAS and R Programming	3
STAT 5303	Experimental Designs	3
STAT 5002	Applied Masters Creative Component	2
Outside Course		3
Hours Subtotal		29
Elective Coursework		
STAT 5033	Nonparametric Methods	
STAT 5043	Sample Survey Designs	
STAT 5053	Time Series Analysis	
STAT 5073	Categorical Data Analysis	
Other courses can be used as electives at the discretion of the MSAS committee and the graduate coordinator.		
The formal report course can take many different forms. One possible incarnation would be to require the students to find suitable data sets to analyze and provide written reports of these analyses. Another possible approach would be to provide the students with data.		3
Hours Subtotal		3
Total Hours		32

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Art History, MA

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 30¹

Code	Title	Hours
Graduate-level seminars		
ART 5920	Art History Graduate Seminar	6
Hours Subtotal		6
Other Requirements		
ART 5013	Theory and Methods in Art History	3
Select 9 hours related to the student's curricular track or geographic areas.		9
Select 6 hours outside of the art history program but related to the student's area of study.		6
Hours Subtotal		18
Thesis		
ART 5000 (Offered for variable credit, 1-3 credit hours, maximum of 6 credit hours.)		6
Hours Subtotal		6
Total Hours		30

¹ At least 21 credit hours must be graduate (5000 or 6000) level courses.

Other Thesis Requirements

- Completed master's thesis and oral defense.
 - Thesis and defense will be supervised and evaluated as to its success or failure by a committee of 3 full-time faculty members with graduate college standing.
 - At least 2 members of the committee must be drawn from the art history faculty, with one of those being the committee chair.
- Plan of Study grade-point-average of 3.0.

Non-Thesis Option

Total Hours: 36²

Code	Title	Hours
Graduate-level seminars		
ART 5920	Art History Graduate Seminar	6
Hours Subtotal		6
Other Requirements		
ART 5013	Theory and Methods in Art History	3
Select 9 hours related to the student's curricular track or geographic areas.		9
Select 12 hours outside of the art history program but related to the student's area of study.		12
Hours Subtotal		24
Thesis		
ART 5000 (Offered for variable credit, 1-3 credit hours, maximum of 6 credit hours.)		6

Hours Subtotal	6
Total Hours	36

² At least 27 hours of the 36 total must be graduate (5000 or 6000) level courses.

Other Non-Thesis Requirements

- Submission of qualifying paper (after the completion of 27 hours) judged satisfactory by a committee of 3 full-time faculty members with graduate college standing. The qualifying paper must be between 15-20 pages in length. It may take one of the following forms: 1) A research paper on a focused topic (a traditional seminar paper); or 2) A scholarly catalog essay. The public presentation may take place in the department as part of the art history roundtable series of talks or at an academic conference.
- Plan of Study grade-point-average of 3.0.

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Athletic Training, MAT

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 59

Code	Title	Hours
Required Courses		
MAT 5103	Emergency Management in Athletic Healthcare	3
MAT 5183	Injury Prevention	3
BIOM 5122	Introduction and Survey of Human Structure	2
MAT 5223	Therapeutic Modalities	3
MAT 5233	Clinical Evaluation and Diagnosis of the Lower Extremity	3
MAT 5243	Therapeutic Exercise of the Lower Extremity	3
MAT 5202	Athletic Training Practicum I	2
MAT 5313	Clinical Evaluation and Diagnosis of Non-Orthopedic Medical Conditions	3
MAT 5333	Clinical Evaluation and Diagnosis of the Upper Extremity	3
MAT 5343	Therapeutic Exercise of the Upper Extremity	3
MAT 5302	Athletic Training Practicum II	2
MAT 5412	Radiography Evaluation and Assessment	2
MAT 5483	Pathology and Pharmacology in Sports Medicine	3
MAT 5402	Athletic Training Practicum III	2
MAT 5553	Research Methods in Athletic Health Care	3
MAT 5573	Athletic Healthcare Administration	3
MAT 5583	Psychosocial Strategies in Athletic Healthcare	3
MAT 5443	Clinical Diagnosis, Evaluation, and Therapeutic Exercise of the Head and Spine	3
MAT 5502	Athletic Training Practicum IV	2
MAT 5602	Athletic Training Practicum V	2
BIOM 5000	Research & Thesis	6
Hours Subtotal		59
Total Hours		59

Non-Thesis Option

Total Hours: 56

Code	Title	Hours
Required Courses		
MAT 5103	Emergency Management in Athletic Healthcare	3
MAT 5183	Injury Prevention	3
BIOM 5122	Introduction and Survey of Human Structure	2

MAT 5223	Therapeutic Modalities	3
MAT 5233	Clinical Evaluation and Diagnosis of the Lower Extremity	3
MAT 5243	Therapeutic Exercise of the Lower Extremity	3
MAT 5202	Athletic Training Practicum I	2
MAT 5313	Clinical Evaluation and Diagnosis of Non-Orthopedic Medical Conditions	3
MAT 5333	Clinical Evaluation and Diagnosis of the Upper Extremity	3
MAT 5343	Therapeutic Exercise of the Upper Extremity	3
MAT 5302	Athletic Training Practicum II	2
MAT 5412	Radiography Evaluation and Assessment	2
MAT 5483	Pathology and Pharmacology in Sports Medicine	3
MAT 5402	Athletic Training Practicum III	2
MAT 5553	Research Methods in Athletic Health Care	3
MAT 5573	Athletic Healthcare Administration	3
MAT 5583	Psychosocial Strategies in Athletic Healthcare	3
MAT 5443	Clinical Diagnosis, Evaluation, and Therapeutic Exercise of the Head and Spine	3
MAT 5502	Athletic Training Practicum IV	2
MAT 5602	Athletic Training Practicum V	2
Complete 3 hours of research		3
Hours Subtotal		56
Total Hours		56

Additional Master of Athletic Training Requirements

- A minimum of "B" or higher required in all coursework.
- Transfers not allowed in this program.

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Aviation and Space, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 33

Code	Title	Hours
Required Courses		
AVED 5453	Advanced Aviation Security	3
AVED 5563	Aerospace Leadership and Management	3
AVED 5663	Issues in the Airline/Aerospace Industry	3
AVED 5773	Historical Significance of Aviation	3
AVED 5823	Space Science	3
AVED 5883	Aviation Economics	3
AVED 5893	Aerospace Executive Decision Making	3
AVED 5953	Labor Relations in Aviation and Aerospace	3
AVED 5963	Airport Operations	3
AVED 5973	Aerospace Law	3
AVED 5993	Ethics in Aviation	3
Total Hours		33

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Biochemistry and Molecular Biology, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 30

Code	Title	Hours
Coursework		
Combination of core courses and other requirements to equal 24 hours.		24
<i>Required Core Courses</i>		
BIOC 5002	Research Compliance and Biochemistry Graduate Colloquium	
BIOC 5112	Articulation of Research Logic	
BIOC 5120	Biochemistry and Molecular Biology Graduate Research Colloquium	
BIOC 5753	Biochemical Principles	
BIOC 5853	Metabolism	
BIOC 5930	Advanced Biochemical Techniques	
BIOC 6110	Seminar	
Plus 2 Advanced (Biochemistry 6000-level courses)		
BIOC 6723	Signal Transduction	
BIOC 6733	Functional Genomics	
BIOC 6740	Physical Biochemistry	
BIOC 6753	Epigenetics	
BIOC 6763	Nucleic Acids and Protein Synthesis	
BIOC 6773	Protein Structure and Enzyme Function	
BIOC 6783	Biomembranes and Bioenergetics	
BIOC 6793	Plant Biochemistry	
<i>Electives</i>		
BIOC 5723	Introduction to Bioinformatics	
BIOC 5102	Molecular Genetics	
BIOC 5824	Biochemical Laboratory Methods	
BIOC 5930	Advanced Biochemical Techniques	
BIOC 6820	Selected Topics in Biochemistry	
Other 6000-level BIOC courses		
Other Graduate-level courses approved by the Graduate Thesis Advisory Committee		
<i>Additional Requirements</i>		
The student's Graduate Committee must approve the written thesis and an oral exam on the context of the thesis must be passed.		
Hours Subtotal		24
Required Research		
BIOC 5000	Research	6
Hours Subtotal		6
Total Hours		30

Non-Thesis Option

Total Hours: 32

Code	Title	Hours
Coursework		
Combination of core courses and other requirements to equal 30 hours.		30
<i>Core courses</i>		
BIOC 5002	Research Compliance and Biochemistry Graduate Colloquium	
BIOC 5112	Articulation of Research Logic	
BIOC 5753	Biochemical Principles	
BIOC 5853	Metabolism	
BIOC 5853	Metabolism	
BIOC 6110	Seminar	
Plus 2 Advanced (Biochemistry 6000-level courses)		
BIOC 6723	Signal Transduction	
BIOC 6733	Functional Genomics	
BIOC 6740	Physical Biochemistry	
BIOC 6753	Epigenetics	
BIOC 6763	Nucleic Acids and Protein Synthesis	
BIOC 6773	Protein Structure and Enzyme Function	
BIOC 6783	Biomembranes and Bioenergetics	
BIOC 6793	Plant Biochemistry	
BIOC 6820	Selected Topics in Biochemistry	
<i>Electives</i>		
BIOC 5723	Introduction to Bioinformatics	
BIOC 5102	Molecular Genetics	
BIOC 5824	Biochemical Laboratory Methods	
Other 6000-level BIOC courses (Graduate-level courses approved by the Graduate Coordinator)		
<i>Other Requirements</i>		
The student's Graduate Committee must approve the written and oral reports and an oral exam must be passed.		
Hours Subtotal		30
Required Research		
BIOC 5000	Research	2
Hours Subtotal		2
Total Hours		32

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Biomedical Sciences, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 30

Code	Title	Hours
Required Courses		
BIOM 5000	Research & Thesis	6
BIOM 5003	Statistics for Medical Residents	3
BIOM 6662	Research Ethics and Survival Skills for the Biomedical Sciences	2
BIOM 6922	Scientific Communication in Biomedical Sciences	2
Hours Subtotal		13
Optional Electives		
Select 17 hours from the following:		17
BIOM 5010	Special Topics in Biomedical Sciences	
BIOM 5020	Biomedical Sciences Seminar	
BIOM 5116	Clinical Anatomy	
BIOM 5122	Introduction and Survey of Human Structure	
BIOM 5133	Neuroanatomy	
BIOM 5144	Histology and Development	
BIOM 5215	Medical Biochemistry	
BIOM 5316	Medical Microbiology and Immunology	
BIOM 5616	Graduate Biomedical Physiology	
BIOM 5621	Introduction to Translational Research	
BIOM 5631	Disease Research in Medicine	
BIOM 5641	Cornerstones of Vertebrate Paleontology	
BIOM 5653	Evolutionary Physiology	
BIOM 5663	Graduate Pharmacology	
BIOM 5672	Scientific Outreach Training for Graduate Students	
BIOM 5683	Chronic Inflammation and Cancer Development	
BIOM 5693	Principle Concepts of Cellular and Molecular Immunology	
BIOM 5703	Applied Multivariate and Evolutionary Analysis of Paleontological Data	
BIOM 5983	Principles of Neuroscience	
BIOM 5993	Principles of Neuroanatomy	
BIOM 6175	Molecular And Cellular Biology	
BIOM 6183	Cellular and Molecular Biology of Pain	
BIOM 6193	Paleommalogy	
BIOM 6214	Advanced Topics in Medical Biochemistry	
BIOM 6233	Enzyme Analysis	
BIOM 6243	Human Nutrition	
BIOM 6263	Techniques in Molecular Biology	
BIOM 6333	Immunology	
BIOM 6343	Microbial Physiology	

BIOM 6353	Molecular Virology
BIOM 6363	Immunobiology of Infectious Disease
BIOM 6413	Graduate General Pathology and Laboratory Medicine
BIOM 6523	Cardiovascular Physiology and Pharmacology
BIOM 6543	Environmental Toxins in the Brain
BIOM 6583	Neuroinflammation
BIOM 6613	Environmental Physiology
BIOM 6643	Neurophysiology
BIOM 6653	Graduate Seminar In Signal Transduction
BIOM 6663	Neuroethology
BIOM 6673	Genomics
BIOM 6705	Advanced Gross Anatomy
BIOM 6723	Field Techniques in Vertebrate Paleontology
BIOM 6733	Human Microbiome in Health and Disease
BIOM 6743	Foundations in Medical Genetics, Molecular Biology and Development
BIOM 6752	Foundations in Medical Cell and Tissue Biology
BIOM 6762	Foundations in Medical Biochemistry
BIOM 6771	Foundations in Medical Pharmacology
BIOM 6781	Foundations in Medical Immunology
BIOM 6793	Foundations in Medical Microbiology
BIOM 6800	Critical Readings in Biomedical Sciences
BIOM 6810	Structure and Function of the Human Cardiovascular System
BIOM 6820	Structure and Function of the Human Gastrointestinal/Hepatic System
BIOM 6830	Biomedical Perspectives on Human Hematology
BIOM 6840	Structure and Function of the Human Musculoskeletal System
BIOM 6843	Vertebrate Osteology
BIOM 6850	Structure and Function of the Human Renal System
BIOM 6860	Structure and Function of the Human Reproductive Systems and Reproductive Biology
BIOM 6870	Structure and Function of the Human Respiratory System
BIOM 6880	Biomedical Perspectives on Psychiatry
BIOM 6900	Structure and Function of the Human Endocrine System
BIOM 6910	Structure and Function of the Human Nervous System
BIOM 6933	Cornerstones of Graduate Biomedical Sciences
BIOM 6943	Advanced Vertebrate Paleontology
BIOM 6952	Paleohistology Techniques
BIOM 6962	Evolutionary Biomechanics
BIOM 6972	Role of Nicotinic Acetylcholine Receptors in Neuropsychiatric Disorders

Hours Subtotal	17
Total Hours	30

Non-Thesis Option

Total Hours: 32

Code	Title	Hours
Required Courses		
BIOM 5000	Research & Thesis	2
BIOM 5003	Statistics for Medical Residents	3
BIOM 6662	Research Ethics and Survival Skills for the Biomedical Sciences	2
BIOM 6922	Scientific Communication in Biomedical Sciences	2
Hours Subtotal		9

Optional Electives	
Select 23 hours from the following:	23

BIOM 5010	Special Topics in Biomedical Sciences	
BIOM 5020	Biomedical Sciences Seminar	
BIOM 5116	Clinical Anatomy	
BIOM 5122	Introduction and Survey of Human Structure	
BIOM 5133	Neuroanatomy	
BIOM 5144	Histology and Development	
BIOM 5215	Medical Biochemistry	
BIOM 5316	Medical Microbiology and Immunology	
BIOM 5616	Graduate Biomedical Physiology	
BIOM 5621	Introduction to Translational Research	
BIOM 5631	Disease Research in Medicine	
BIOM 5641	Cornerstones of Vertebrate Paleontology	
BIOM 5653	Evolutionary Physiology	
BIOM 5663	Graduate Pharmacology	
BIOM 5672	Scientific Outreach Training for Graduate Students	
BIOM 5683	Chronic Inflammation and Cancer Development	
BIOM 5693	Principle Concepts of Cellular and Molecular Immunology	
BIOM 5703	Applied Multivariate and Evolutionary Analysis of Paleontological Data	
BIOM 5983	Principles of Neuroscience	
BIOM 5993	Principles of Neuroanatomy	
BIOM 6175	Molecular And Cellular Biology	
BIOM 6183	Cellular and Molecular Biology of Pain	
BIOM 6193	Paleommalogy	
BIOM 6214	Advanced Topics in Medical Biochemistry	
BIOM 6233	Enzyme Analysis	
BIOM 6243	Human Nutrition	
BIOM 6263	Techniques in Molecular Biology	
BIOM 6333	Immunology	
BIOM 6343	Microbial Physiology	
BIOM 6353	Molecular Virology	
BIOM 6363	Immunobiology of Infectious Disease	

BIOM 6413	Graduate General Pathology and Laboratory Medicine	
BIOM 6523	Cardiovascular Physiology and Pharmacology	
BIOM 6543	Environmental Toxins in the Brain	
BIOM 6583	Neuroinflammation	
BIOM 6613	Environmental Physiology	
BIOM 6643	Neurophysiology	
BIOM 6653	Graduate Seminar In Signal Transduction	
BIOM 6663	Neuroethology	
BIOM 6673	Genomics	
BIOM 6705	Advanced Gross Anatomy	
BIOM 6723	Field Techniques in Vertebrate Paleontology	
BIOM 6733	Human Microbiome in Health and Disease	
BIOM 6743	Foundations in Medical Genetics, Molecular Biology and Development	
BIOM 6752	Foundations in Medical Cell and Tissue Biology	
BIOM 6762	Foundations in Medical Biochemistry	
BIOM 6771	Foundations in Medical Pharmacology	
BIOM 6781	Foundations in Medical Immunology	
BIOM 6793	Foundations in Medical Microbiology	
BIOM 6800	Critical Readings in Biomedical Sciences	
BIOM 6810	Structure and Function of the Human Cardiovascular System	
BIOM 6820	Structure and Function of the Human Gastrointestinal/Hepatic System	
BIOM 6830	Biomedical Perspectives on Human Hematology	
BIOM 6840	Structure and Function of the Human Musculoskeletal System	
BIOM 6843	Vertebrate Osteology	
BIOM 6850	Structure and Function of the Human Renal System	
BIOM 6860	Structure and Function of the Human Reproductive Systems and Reproductive Biology	
BIOM 6870	Structure and Function of the Human Respiratory System	
BIOM 6880	Biomedical Perspectives on Psychiatry	
BIOM 6900	Structure and Function of the Human Endocrine System	
BIOM 6910	Structure and Function of the Human Nervous System	
BIOM 6933	Cornerstones of Graduate Biomedical Sciences	
BIOM 6943	Advanced Vertebrate Paleontology	
BIOM 6952	Paleohistology Techniques	
BIOM 6962	Evolutionary Biomechanics	
BIOM 6972	Role of Nicotinic Acetylcholine Receptors in Neuropsychiatric Disorders	
Hours Subtotal		23
Total Hours		32

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Biosystems Engineering, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 30

Code	Title	Hours
Core Coursework		
BAE 5501	Seminar	1
Select 23 approved hours, based on Plan of Study		23
Hours Subtotal		24
Thesis		
BAE 5000	Master's Research and Thesis	6
Hours Subtotal		6
Total Hours		30

Non-Thesis Option

Total Hours: 32

Code	Title	Hours
Core Coursework		
BAE 5501	Seminar	1
Select 31 approved hours, based on Plan of Study.		31
Hours Subtotal		32
Total Hours		32

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Business Administration, MBA

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 36 (33 for part-time and distance MBA students)

Code	Title	Hours
Degree Core - Required Courses		
MGMT 5113	Individual and Organizational Behavior	3
MGMT 5303	Corporate and Business Strategy	3
ACCT 5183	MBA Financial Reporting	3
ECON 5113	Managerial Economics	3
FIN 5013	Business Finance	3
MKTG 5133	Marketing Management	3
MSIS 5303	Prescriptive Analytics	3
MBA 5100	Professional Development (Part 1) ¹	1
MBA 5100	Professional Development (Part 2) ¹	1
MBA 5100	Professional Development (Case Consulting) ¹	1
MBA 5300	Current Business Topics (Ethics and Corporate Social Responsibility)	1
MBA 5400	Business Practicum (Descriptive Analytics)	1
MBA 5500	Interdisciplinary Inquiry in Business Administration (Project Management)	1
Hours Subtotal		27
Electives		
Select 9 hours from the following:		9
EEE 5090	Study Abroad In Entrepreneurship	
EEE 5233	Ideation, Creativity & Innovation	
EEE 5123	Entrepreneurship and The Arts	
EEE 5133	Dilemmas and Debates in Entrepreneurship	
EEE 5200	Special Topics in Entrepreneurship	
EEE 5223	Entrepreneurial Marketing	
EEE 5263	Corporate Entrepreneurship	
EEE 5313	Emerging Enterprise Consulting	
EEE 5333	Launching a Business: The First 100 Days	
EEE 5403	Social Entrepreneurship	
EEE 5493	Entrepreneurship and Architecture	
EEE 5503	Designing, Prototyping, and Testing Creative Products	
EEE 5513	Growing Small and Family Ventures	
EEE 5653	Venture Capital	
EEE 5813	The Entrepreneur: Hero or Villain	
EEE 5903	Applied Innovation I	
FIN 5053	Theory and Practice of Financial Management	
FIN 5153	Corporate Financial Strategy	
FIN 5213	International Business Finance	
FIN 5223	Investment Theory and Strategy	
FIN 5243	Financial Markets	
FIN 5343	Valuation and Financial Modeling	
FIN 5363	Energy Finance	

FIN 5550	Special Topics in Finance
FIN 5763	Derivative Securities and the Management of Financial Price Risk
FIN 5833	Student Managed Investment Fund
FIN 5883	Quantitative Financial Applications
LSB 5163	Legal Environment of Business
LSB 5203	Foundations of Issue and Conflict Management
LSB 5423	Employment Law
MGMT 5011	Crucial Interactions
MGMT 5021	Managing Professional Relationships
MGMT 5033	Management of Sustainable Enterprises
MGMT 5041	Performance Management
MGMT 5083	Corporate and Social Responsibility
MGMT 5093	Management of Nonprofit Organizations
MGMT 5123	Org Design & Research
MGMT 5133	Total Rewards
MGMT 5153	Talent Development
MGMT 5163	Fundraising for Nonprofit Organizations
MGMT 5223	Seminar in Human Resource Management
MGMT 5313	Project Management
MGMT 5323	Teams in Organizations
MGMT 5500	Special Projects in Management
MGMT 5533	Leadership Challenges
MGMT 5543	Human Resource Analytics
MGMT 5643	Sport Management
MGMT 5673	Advanced Sport Management
MGMT 5713	Negotiation and Third-Party Dispute Resolution
MGMT 5823	Talent Acquisition
MGMT 5843	Advanced Strategic Sports Management
MGMT 5943	Advanced International Sports Management
MSIS 5033	Information Systems Project Management
MSIS 5133	Advanced Web Based Application Development
MSIS 5213	Information Assurance Management
MSIS 5253	Advanced System Certification and Accreditation
MSIS 5273	Legal and Ethical Issues in Information Technology
MSIS 5313	Supply Chain Analytics
MSIS 5393	Advanced Spreadsheet Modeling
MSIS 5410	Advanced Topics in Information Assurance
MSIS 5623	Information and Network Technology Management
MSIS 5643	Advanced Database Management
MSIS 5653	Advanced Systems Analysis and Design
MSIS 5663	Data Warehousing
MSIS 5673	Descriptive Analytics and Visualization
MSIS 5683	Big Data Advanced Analytics Technologies
MSIS 5713	Scripting Essentials
MSIS 5773	The Upper Layers of Telecommunications Systems

MKTG 5223	Entrepreneurial Marketing	
MKTG 5233	Global Competitive Environment	
MKTG 5243	Base SAS Programming for Database Marketing	
MKTG 5253	Advanced SAS Programming for Marketing Analytics	
MKTG 5443	Social Issues in Marketing Environment	
MKTG 5500	Current Topics in Marketing Analytics	
MKTG 5543	Social Media Strategies	
MKTG 5553	International Marketing Strategy	
MKTG 5743	Advanced Marketing Analytics	
MKTG 5963	Data Mining and Customer Relationship Management Applications	
MKTG 5983	Data Base Marketing	
Hours Subtotal		9
Total Hours		36

¹ Waived for part-time and distance MBA students

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Business Administration: Accounting, MBA

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 39

Code	Title	Hours
Degree Core		
<i>Required Courses</i>		
MGMT 5113	Individual and Organizational Behavior	3
MGMT 5303	Corporate and Business Strategy	3
MBA 5300	Current Business Topics	1
MBA 5400	Business Practicum	1
MBA 5500	Interdisciplinary Inquiry in Business Administration	1
ACCT 5183	MBA Financial Reporting	3
ECON 5113	Managerial Economics	3
FIN 5013	Business Finance	3
MKTG 5133	Marketing Management	3
MSIS 5303	Prescriptive Analytics	3
MBA 5100	Professional Development (Part 1) ¹	1
MBA 5100	Professional Development (Case Consulting) ¹	1
MBA 5100	Professional Development (Part 2) ¹	1
Hours Subtotal		27
Option Requirements		
ACCT 5003	Advanced Federal Income Taxation	3
ACCT 5013	Tax Research	3
or ACCT 5113	Financial Accounting Research	
ACCT 5103	Seminar in Contemporary Accounting Theory I	3
ACCT 5153	Financial Statement Analysis	3
Hours Subtotal		12
Total Hours		39

¹ Not required for online or professional MBA.

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Business Administration: Business Sustainability, MBA

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 39

Code	Title	Hours
Degree Core		
<i>Required Courses</i>		
MGMT 5113	Individual and Organizational Behavior	3
MGMT 5303	Corporate and Business Strategy	3
MBA 5300	Current Business Topics	1
MBA 5400	Business Practicum	1
MBA 5500	Interdisciplinary Inquiry in Business Administration	1
ACCT 5183	MBA Financial Reporting	3
ECON 5113	Managerial Economics	3
FIN 5013	Business Finance	3
MKTG 5133	Marketing Management	3
MSIS 5303	Prescriptive Analytics	3
MBA 5100	Professional Development (Part 1) ¹	1
MBA 5100	Professional Development (Case Consulting) ¹	1
MBA 5100	Professional Development (Part 2) ¹	1
Hours Subtotal		27
Option Requirements		
MGMT 5033	Management of Sustainable Enterprises	3
MGMT 5083	Corporate and Social Responsibility	3
Select 6 hours of the following:		6
MKTG 5333	Marketing for Nonprofit Organizations	
MKTG 5443	Social Issues in Marketing Environment	
MGMT 5073	Management and Ethical Leadership	
MGMT 5093	Management of Nonprofit Organizations	
MGMT 5533	Leadership Challenges	
MGMT 5113	Individual and Organizational Behavior	
EEE 5123	Entrepreneurship and The Arts	
EEE 5403	Social Entrepreneurship	
EEE 5603	Entrepreneurship Empowerment in South Africa	
Hours Subtotal		12
Total Hours		39

¹ Not required for online or professional MBA.

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Business Administration: Data Science, MBA

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 39

Code	Title	Hours
Degree Core		
<i>Required Courses</i>		
MGMT 5113	Individual and Organizational Behavior	3
MGMT 5303	Corporate and Business Strategy	3
MBA 5300	Current Business Topics	1
MBA 5400	Business Practicum	1
MBA 5500	Interdisciplinary Inquiry in Business Administration	1
ACCT 5183	MBA Financial Reporting	3
ECON 5113	Managerial Economics	3
FIN 5013	Business Finance	3
MKTG 5133	Marketing Management	3
MSIS 5303	Prescriptive Analytics	3
MBA 5100	Professional Development (Part 1) ¹	1
MBA 5100	Professional Development (Case Consulting) ¹	1
MBA 5100	Professional Development (Part 2) ¹	1
Hours Subtotal		27
Option Requirements		
MSIS 5643	Advanced Database Management	3
MSIS 5673	Descriptive Analytics and Visualization	3
Select 6 hours from the following:		6
MSIS 5193	Programming for Data Science and Analytics I	
MSIS 5223	Programming for Data Science and Analytics II	
MSIS 5313	Supply Chain Analytics	
MSIS 5393	Advanced Spreadsheet Modeling	
MSIS 5503	Statistics for Data Science	
MSIS 5633	Predictive Analytics Technologies	
MSIS 5683	Big Data Advanced Analytics Technologies	
Hours Subtotal		12
Total Hours		39

¹ 1 credit hour class taken each semester (3 semesters)

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Business Administration: Economics, MBA

regulations for minimal GPA, language proficiency and other general requirements.

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 45

Code	Title	Hours
Degree Core		
<i>Required Courses</i>		
MGMT 5113	Individual and Organizational Behavior	3
MGMT 5303	Corporate and Business Strategy	3
MKTG 5633	The External Environment of Business	3
or LSB 5163	Legal Environment of Business	
or MGMT 5073	Management and Ethical Leadership	
ACCT 5183	MBA Financial Reporting	3
ACCT 5283	MBA Managerial Accounting	3
ECON 5113	Managerial Economics	3
FIN 5013	Business Finance	3
FIN 5053	Theory and Practice of Financial Management (or other Finance 5000-level course)	3
or MKTG 5733	Introduction to Marketing Analytics	
or MSIS 5633	Predictive Analytics Technologies	
MKTG 5133	Marketing Management	3
MSIS 5303	Prescriptive Analytics	3
MBA 5100	Professional Development (Part 1) ¹	1
MBA 5100	Professional Development (Case Consulting) ¹	1
MBA 5100	Professional Development (Part 2) ¹	1
Hours Subtotal		33
Option Requirements		
Select 12 hours from the following:		12
ECON 4223	Business and Economic Forecasting	
ECON 5010	Research and Independent Studies	
ECON 5033	Macroeconomic Analysis	
ECON 5213	Introduction to Econometrics	
ECON 5733	Energy Economics: Traditional and Renewable Energy Markets	
ECON 6013	Microeconomic Theory I	
ECON 6213	Econometrics I	
ECON 6323	Mathematical Economics I	
Hours Subtotal		12
Total Hours		45

¹ Not required for online or professional MBA.

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic

Business Administration: Energy Business, MBA

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 39

Code	Title	Hours
Degree Core		
<i>Required Courses</i>		
MGMT 5113	Individual and Organizational Behavior	3
MGMT 5303	Corporate and Business Strategy	3
MBA 5300	Current Business Topics	1
MBA 5400	Business Practicum	1
MBA 5500	Interdisciplinary Inquiry in Business Administration	1
ACCT 5183	MBA Financial Reporting	3
ECON 5113	Managerial Economics	3
FIN 5013	Business Finance	3
MKTG 5133	Marketing Management	3
MSIS 5303	Prescriptive Analytics	3
MBA 5100	Professional Development (Part 1) ¹	1
MBA 5100	Professional Development (Case Consulting) ¹	1
MBA 5100	Professional Development (Part 2) ¹	1
Hours Subtotal		27
Option Requirements		
FIN 5003	Introduction to Energy Business	3
FIN 5363	Energy Finance	3
Select 6 hours of the following:		6
ENGR 5010	Engineering Problems and Design	
GEOL 5990	Advanced Studies in Geology	
ECON 5010	Research and Independent Studies (Energy Economics)	
FIN 5053	Theory and Practice of Financial Management	
FIN 5763	Derivative Securities and the Management of Financial Price Risk	
MSIS 5393	Advanced Spreadsheet Modeling	
Hours Subtotal		12
Total Hours		39

¹ Not required for online or professional MBA.

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Business Administration: Entrepreneurship, MBA

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 39

Code	Title	Hours
Degree Core		
<i>Required Courses</i>		
MGMT 5113	Individual and Organizational Behavior	3
MGMT 5303	Corporate and Business Strategy	3
MBA 5300	Current Business Topics	1
MBA 5400	Business Practicum	1
MBA 5500	Interdisciplinary Inquiry in Business Administration	1
ACCT 5183	MBA Financial Reporting	3
ECON 5113	Managerial Economics	3
FIN 5013	Business Finance	3
MKTG 5133	Marketing Management	3
MSIS 5303	Prescriptive Analytics	3
MBA 5100	Professional Development (Part 1)	1
MBA 5100	Professional Development (Case Consulting)	1
MBA 5100	Professional Development (Part 2)	1
Hours Subtotal		27
Option Requirements		
EEE 5113	Entrepreneurship and Venture Management	3
Select 9 hours of the following:		9
EEE 5133	Dilemmas and Debates in Entrepreneurship	
EEE 5200	Special Topics in Entrepreneurship (Commercializing of new Technology)	
EEE 5200	Special Topics in Entrepreneurship (Real Estate Development)	
EEE 5223	Entrepreneurial Marketing	
EEE 5233	Ideation, Creativity & Innovation	
EEE 5263	Corporate Entrepreneurship	
EEE 5313	Emerging Enterprise Consulting	
EEE 5333	Launching a Business: The First 100 Days	
EEE 5403	Social Entrepreneurship	
EEE 5513	Growing Small and Family Ventures	
EEE 5610	Advanced Entrepreneurship Practicum (Entrepreneurship Initiative - Wal-Mart)	
EEE 5610	Advanced Entrepreneurship Practicum (Project MGMT Consulting)	
EEE 5610	Advanced Entrepreneurship Practicum (Advanced Practicum CIE Scholar)	
EEE 5653	Venture Capital	
EEE 5713	Native American Entrepreneurship	
EEE 5993	Preparing Effective Business Plans	

Hours Subtotal	12
Total Hours	39

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Business Administration: Finance Investment Banking, MBA

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 39

Code	Title	Hours
Core Requirements		
MBA 5100	Professional Development ¹	3
MGMT 5113	Individual and Organizational Behavior	3
MGMT 5303	Corporate and Business Strategy	3
ACCT 5183	MBA Financial Reporting	3
ECON 5113	Managerial Economics	3
FIN 5013	Business Finance	3
MKTG 5133	Marketing Management	3
MSIS 5303	Prescriptive Analytics	3
MBA 5300	Current Business Topics	1
MBA 5400	Business Practicum	1
MBA 5500	Interdisciplinary Inquiry in Business Administration	1
Hours Subtotal		27
Program Option Requirements		
FIN 5053	Theory and Practice of Financial Management	3
FIN 5223	Investment Theory and Strategy	3
FIN 5343	Valuation and Financial Modeling	3
Select 3 hours from the following (if a student has taken the equivalent of FIN 5013 - part of the Common Core - and is waived out of it, they need to take an extra elective from one of the following courses):		3
FIN 5363	Energy Finance	
FIN 5833	Student Managed Investment Fund	
FIN 5550	Special Topics in Finance (Securities Industry Essentials)	
FIN 5550	Special Topics in Finance (Computational Finance)	
Hours Subtotal		12
Total Hours		39

¹ Part-time MBA with an option is 36 hours with same requirements minus MBA 5100.

Business Administration: Global Marketing, MBA

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 39

Code	Title	Hours
Degree Core		
<i>Required Courses</i>		
MGMT 5113	Individual and Organizational Behavior	3
MGMT 5303	Corporate and Business Strategy	3
MBA 5300	Current Business Topics	1
MBA 5400	Business Practicum	1
MBA 5500	Interdisciplinary Inquiry in Business Administration	1
ACCT 5183	MBA Financial Reporting	3
ECON 5113	Managerial Economics	3
FIN 5013	Business Finance	3
MKTG 5133	Marketing Management	3
MSIS 5303	Prescriptive Analytics	3
MBA 5100	Professional Development (Part 1) ¹	1
MBA 5100	Professional Development (Case Consulting) ¹	1
MBA 5100	Professional Development (Part 2) ¹	1
Hours Subtotal		27
Option Requirements		
MKTG 5233	Global Competitive Environment	3
MKTG 5553	International Marketing Strategy	3
Select 6 hours of the following:		6
AGIN 5353	Advanced Case Studies in Agricultural Marketing and International Development	
ANTH 5243	Globalization and Culture	
MBA 5010	Independent Study	
MKTG 5220	Seminar in Marketing	
MKTG 5633	The External Environment of Business	
GS 5020	Independent Study	
GS 5070	Special Topics in Global Studies	
GS 5313	Global Communication and Public Diplomacy	
GS 5323	Nation Branding	
GS 5343	Geopolitics of New Media	
GS 5413	Global Development	
GS 5513	Global Crisis Management	
Hours Subtotal		12
Total Hours		39

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

¹ Not required for online or professional MBA.

Business Administration: Hospitality and Tourism Management, MBA

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 39

Code	Title	Hours
Core Courses		
MBA 5100	Professional Development ¹	3
MGMT 5113	Individual and Organizational Behavior	3
MGMT 5303	Corporate and Business Strategy	3
ACCT 5183	MBA Financial Reporting	3
ECON 5113	Managerial Economics	3
FIN 5013	Business Finance	3
MKTG 5133	Marketing Management	3
MSIS 5303	Prescriptive Analytics	3
MBA 5300	Current Business Topics	1
MBA 5400	Business Practicum	1
MBA 5500	Interdisciplinary Inquiry in Business Administration	1
Hours Subtotal		27
Program Option Requirements		
Select two courses from the required courses list:		6
HTM 5413	Hospitality Human Resources Management	
HTM 5323	Hospitality and Tourism Financial Management	
HTM 5423	Hospitality and Tourism Marketing Management	
HTM 5513	Hospitality Strategic Management	
Select two courses from the electives list:		6
HTM 5233	Convention and Special Event Management	
HTM 5263	Applied Revenue Management in Hospitality and Tourism Management	
HTM 5503	Big Data Analytics in Hospitality and Tourism Management	
HTM 5850	Special Topics in the Hospitality Industry	
Hours Subtotal		12
Total Hours		39

¹ Part-time MBA with an option is 36 hours with same requirements minus MBA 5100.

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Business Administration: Human Resource Management, MBA

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 42

Code	Title	Hours
Degree Core		
<i>Required Courses</i>		
MGMT 5113	Individual and Organizational Behavior	3
MGMT 5303	Corporate and Business Strategy	3
MBA 5300	Current Business Topics	1
MBA 5400	Business Practicum	1
MBA 5500	Interdisciplinary Inquiry in Business Administration	1
ACCT 5183	MBA Financial Reporting	3
ECON 5113	Managerial Economics	3
FIN 5013	Business Finance	3
MKTG 5133	Marketing Management	3
MSIS 5303	Prescriptive Analytics	3
MBA 5100	Professional Development (Part 1) ¹	1
MBA 5100	Professional Development (Case Consulting) ¹	1
MBA 5100	Professional Development (Part 2) ¹	1
Hours Subtotal		27
Option Requirements		
MGMT 5133	Total Rewards	3
MGMT 5153	Talent Development	3
MGMT 5543	Human Resource Analytics	3
MGMT 5823	Talent Acquisition	3
LSB 5423	Employment Law	3
Hours Subtotal		15
Total Hours		42

¹ Not required for online or professional MBA.

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Business Administration: Information Assurance, MBA

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 39

Code	Title	Hours
Degree Core		
<i>Required Courses</i>		
MGMT 5113	Individual and Organizational Behavior	3
MGMT 5303	Corporate and Business Strategy	3
MBA 5300	Current Business Topics	1
MBA 5400	Business Practicum	1
MBA 5500	Interdisciplinary Inquiry in Business Administration	1
ACCT 5183	MBA Financial Reporting	3
ECON 5113	Managerial Economics	3
FIN 5013	Business Finance	3
MKTG 5133	Marketing Management	3
MSIS 5303	Prescriptive Analytics	3
MBA 5100	Professional Development (Part 1) ¹	1
MBA 5100	Professional Development (Case Consulting) ¹	1
MBA 5100	Professional Development (Part 2) ¹	1
Hours Subtotal		27
Option Requirements		
MSIS 5203	Advanced Infrastructure Development	3
MSIS 5213	Information Assurance Management	3
Select 6 hours from the following:		6
MSIS 5233	Applied Information Systems Security	
MSIS 5253	Advanced System Certification and Accreditation	
MSIS 5273	Legal and Ethical Issues in Information Technology	
MSIS 5713	Scripting Essentials	
Hours Subtotal		12
Total Hours		39

¹ Not required for online or professional MBA.

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Business Administration: Marketing Analytics, MBA

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 39

Code	Title	Hours
Degree Core		
<i>Required Courses</i>		
MGMT 5113	Individual and Organizational Behavior	3
MGMT 5303	Corporate and Business Strategy	3
MBA 5300	Current Business Topics	1
MBA 5400	Business Practicum	1
MBA 5500	Interdisciplinary Inquiry in Business Administration	1
ACCT 5183	MBA Financial Reporting	3
ECON 5113	Managerial Economics	3
FIN 5013	Business Finance	3
MKTG 5133	Marketing Management	3
MSIS 5303	Prescriptive Analytics	3
MBA 5100	Professional Development (Part 1) ¹	1
MBA 5100	Professional Development (Case Consulting) ¹	1
MBA 5100	Professional Development (Part 2) ¹	1
Hours Subtotal		27
Option Requirements		
MKTG 5733	Introduction to Marketing Analytics	3
MKTG 5743	Advanced Marketing Analytics	3
Select 6 hours from the following:		6
MKTG 5243	Base SAS Programming for Database Marketing	
MKTG 5500	Current Topics in Marketing Analytics	
MSIS 5303	Prescriptive Analytics	
MSIS 5633	Predictive Analytics Technologies	
Hours Subtotal		12
Total Hours		39

¹ Not required for online or professional MBA.

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Business Administration: Nonprofit Management, MBA

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 39

Code	Title	Hours
Degree Core		
<i>Required Courses</i>		
MGMT 5113	Individual and Organizational Behavior	3
MGMT 5303	Corporate and Business Strategy	3
MBA 5300	Current Business Topics	1
MBA 5400	Business Practicum	1
MBA 5500	Interdisciplinary Inquiry in Business Administration	1
ACCT 5183	MBA Financial Reporting	3
ECON 5113	Managerial Economics	3
FIN 5013	Business Finance	3
MKTG 5133	Marketing Management	3
MSIS 5303	Prescriptive Analytics	3
MBA 5100	Professional Development (Part 1) ¹	1
MBA 5100	Professional Development (Case Consulting) ¹	1
MBA 5100	Professional Development (Part 2) ¹	1
Hours Subtotal		27
Option Requirements		
MGMT 5093	Management of Nonprofit Organizations	3
MGMT 5163	Fundraising for Nonprofit Organizations	3
Select 6 hours from the following:		6
MGMT 5073	Management and Ethical Leadership	
MGMT 5533	Leadership Challenges	
MGMT 5133	Total Rewards	
MGMT 5713	Negotiation and Third-Party Dispute Resolution	
AGED 5203	Grant Seeking	
EEE 5403	Social Entrepreneurship	
EEE 5603	Entrepreneurship Empowerment in South Africa	
Hours Subtotal		12
Total Hours		39

¹ Not required for online or professional MBA.

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Business Analytics and Data Science, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 37

Code	Title	Hours
Required Courses		
BAN 5400	Practicum in Business Analytics	2
BAN 5560	Business Analytics Research and Communications (Research and Communications I)	1
BAN 5560	Business Analytics Research and Communications (Research and Communications II)	1
BAN 5733	Descriptive Business Analytics	3
BAN 5743	Predictive Business Analytics	3
BAN 5753	Advanced Business Analytics	3
MSIS 5503	Statistics for Data Science	3
MSIS 5193	Programming for Data Science and Analytics I	3
MSIS 5633	Predictive Analytics Technologies	3
Hours Subtotal		22
Electives		
Select 15 hours from the following:		15
ACCT 5183	MBA Financial Reporting	
BAN 5511	Web Analytics and Digital Marketing	
BAN 5521	GIS Applications in Marketing Analytics	
BAN 5530	Consulting in Marketing Analytics	
BAN 5541	Using R in Marketing Analytics	
BAN 5551	Optimization Applications in Marketing Analytics	
BAN 5561	Customer Lifetime Value Models in Marketing	
BAN 5563	Strategic Marketing and Business Analytics	
BAN 5763	Advanced Marketing Research Analytics	
BAN 5900	Advanced Practicum in Business Analytics	
ECON 5113	Managerial Economics	
EEE 5863	CIE Scholar Practicum	
FIN 5013	Business Finance	
HCA 5013	Survey of Health Care Administration	
MKTG 5133	Marketing Management	
MKTG 5243	Base SAS Programming for Database Marketing	
MKTG 5253	Advanced SAS Programming for Marketing Analytics	
MSIS 5213	Information Assurance Management	
MSIS 5223	Programming for Data Science and Analytics II	
MSIS 5243	Information Technology Forensics	
MSIS 5303	Prescriptive Analytics	

MSIS 5663	Data Warehousing	
MSIS 5673	Descriptive Analytics and Visualization	
MSIS 5683	Big Data Advanced Analytics Technologies	
MSIS 5713	Scripting Essentials	
STAT 5013	Statistics for Experimenters I	
STAT 5053	Time Series Analysis	
STAT 5213	Bayesian Analysis	
Hours Subtotal		15
Total Hours		37

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Business Analytics and Data Science: Advanced Data Science, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 37

Code	Title	Hours
Required Core Courses		
BAN 5400	Practicum in Business Analytics	2
BAN 5560	Business Analytics Research and Communications (Research and Communications I)	1
BAN 5560	Business Analytics Research and Communications (Research and Communications II)	1
BAN 5733	Descriptive Business Analytics	3
BAN 5743	Predictive Business Analytics	3
BAN 5753	Advanced Business Analytics	3
MSIS 5503	Statistics for Data Science	3
MSIS 5193	Programming for Data Science and Analytics I	3
MSIS 5633	Predictive Analytics Technologies	3
Hours Subtotal		22
Required Option Courses		
MSIS 5223	Programming for Data Science and Analytics II	3
MSIS 5663	Data Warehousing	3
Hours Subtotal		6
Electives		
<i>Required Option Electives</i>		
Select 6 hours from the following or other courses as approved by the program director.		6
MSIS 5303	Prescriptive Analytics	
MSIS 5683	Big Data Advanced Analytics Technologies	
MSIS 5713	Scripting Essentials	
MSIS 5900	Practicum in Management Information Systems	
Select 3 hours from the following or other courses as approved by program director.		3
ACCT 5183	MBA Financial Reporting	
BAN 5511	Web Analytics and Digital Marketing	
BAN 5521	GIS Applications in Marketing Analytics	
BAN 5530	Consulting in Marketing Analytics	
BAN 5541	Using R in Marketing Analytics	
BAN 5551	Optimization Applications in Marketing Analytics	
BAN 5561	Customer Lifetime Value Models in Marketing	
BAN 5563	Strategic Marketing and Business Analytics	
BAN 5763	Advanced Marketing Research Analytics	
BAN 5900	Advanced Practicum in Business Analytics	
ECON 5113	Managerial Economics	

EEE 5863	CIE Scholar Practicum	
FIN 5013	Business Finance	
HCA 5013	Survey of Health Care Administration	
MKTG 5133	Marketing Management	
MKTG 5243	Base SAS Programming for Database Marketing	
MKTG 5253	Advanced SAS Programming for Marketing Analytics	
MSIS 5213	Information Assurance Management	
MSIS 5243	Information Technology Forensics	
MSIS 5673	Descriptive Analytics and Visualization	
STAT 5013	Statistics for Experimenters I	
STAT 5053	Time Series Analysis	
STAT 5213	Bayesian Analysis	
Other courses as approved by program director.		
Hours Subtotal		9
Total Hours		37

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Business Analytics and Data Science: Cybersecurity Analytics, MS

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 37

Code	Title	Hours
Required Core Courses		
BAN 5400	Practicum in Business Analytics	2
BAN 5560	Business Analytics Research and Communications (Research and Communications I)	1
BAN 5560	Business Analytics Research and Communications (Research and Communications II)	1
BAN 5733	Descriptive Business Analytics	3
BAN 5743	Predictive Business Analytics	3
BAN 5753	Advanced Business Analytics	3
MSIS 5503	Statistics for Data Science	3
MSIS 5193	Programming for Data Science and Analytics I	3
MSIS 5633	Predictive Analytics Technologies	3
Hours Subtotal		22
Required Option Courses		
MSIS 5213	Information Assurance Management	3
MSIS 5203	Advanced Infrastructure Development	3
Hours Subtotal		6
Electives		
<i>Required Option Electives</i>		
Select 6 hours from the following or other courses as approved by the program director.		6
MSIS 5713	Scripting Essentials	
MSIS 5273	Legal and Ethical Issues in Information Technology	
MSIS 5253	Advanced System Certification and Accreditation	
Select 3 hours from the following or other courses as approved by program director.		3
ACCT 5183	MBA Financial Reporting	
BAN 5511	Web Analytics and Digital Marketing	
BAN 5521	GIS Applications in Marketing Analytics	
BAN 5530	Consulting in Marketing Analytics	
BAN 5541	Using R in Marketing Analytics	
BAN 5551	Optimization Applications in Marketing Analytics	
BAN 5561	Customer Lifetime Value Models in Marketing	
BAN 5563	Strategic Marketing and Business Analytics	
BAN 5763	Advanced Marketing Research Analytics	
BAN 5900	Advanced Practicum in Business Analytics	
ECON 5113	Managerial Economics	
EEE 5863	CIE Scholar Practicum	

FIN 5013	Business Finance	
HCA 5013	Survey of Health Care Administration	
MKTG 5133	Marketing Management	
MKTG 5243	Base SAS Programming for Database Marketing	
MKTG 5253	Advanced SAS Programming for Marketing Analytics	
MSIS 5223	Programming for Data Science and Analytics II	
MSIS 5243	Information Technology Forensics	
MSIS 5303	Prescriptive Analytics	
MSIS 5663	Data Warehousing	
MSIS 5673	Descriptive Analytics and Visualization	
MSIS 5683	Big Data Advanced Analytics Technologies	
STAT 5013	Statistics for Experimenters I	
STAT 5053	Time Series Analysis	
STAT 5213	Bayesian Analysis	
Other courses as approved by program director.		
Hours Subtotal		9
Total Hours		37

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Business Analytics and Data Science: Health Analytics, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 37

Code	Title	Hours
Required Core Courses		
BAN 5400	Practicum in Business Analytics	2
BAN 5560	Business Analytics Research and Communications (Research and Communications I)	1
BAN 5560	Business Analytics Research and Communications (Research and Communications II)	1
BAN 5733	Descriptive Business Analytics	3
BAN 5743	Predictive Business Analytics	3
BAN 5753	Advanced Business Analytics	3
MSIS 5503	Statistics for Data Science	3
MSIS 5193	Programming for Data Science and Analytics I	3
MSIS 5633	Predictive Analytics Technologies	3
Hours Subtotal		22
Required Option Courses		
HCA 5013	Survey of Health Care Administration	3
MSIS 5673	Descriptive Analytics and Visualization	3
Hours Subtotal		6
Electives		
<i>Required Option Electives</i>		
Select 6 hours from the following or other courses as approved by the program director.		6
MSIS 5303	Prescriptive Analytics	
MSIS 5663	Data Warehousing	
MSIS 5683	Big Data Advanced Analytics Technologies	
Select 3 hours from the following or other courses as approved by program director.		3
ACCT 5183	MBA Financial Reporting	
BAN 5511	Web Analytics and Digital Marketing	
BAN 5521	GIS Applications in Marketing Analytics	
BAN 5530	Consulting in Marketing Analytics	
BAN 5541	Using R in Marketing Analytics	
BAN 5551	Optimization Applications in Marketing Analytics	
BAN 5561	Customer Lifetime Value Models in Marketing	
BAN 5563	Strategic Marketing and Business Analytics	
BAN 5763	Advanced Marketing Research Analytics	
BAN 5900	Advanced Practicum in Business Analytics	
ECON 5113	Managerial Economics	
EEE 5863	CIE Scholar Practicum	
FIN 5013	Business Finance	

HCA 5013	Survey of Health Care Administration	
MKTG 5133	Marketing Management	
MKTG 5243	Base SAS Programming for Database Marketing	
MKTG 5253	Advanced SAS Programming for Marketing Analytics	
MSIS 5213	Information Assurance Management	
MSIS 5223	Programming for Data Science and Analytics II	
MSIS 5243	Information Technology Forensics	
MSIS 5673	Descriptive Analytics and Visualization	
MSIS 5713	Scripting Essentials	
STAT 5013	Statistics for Experimenters I	
STAT 5053	Time Series Analysis	
STAT 5213	Bayesian Analysis	
Other courses as approved by program director.		
Hours Subtotal		9
Total Hours		37

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Business Analytics and Data Science: Marketing Analytics, MS

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 37

Code	Title	Hours
Required Core Courses		
BAN 5400	Practicum in Business Analytics	2
BAN 5560	Business Analytics Research and Communications (Research and Communications I)	1
BAN 5560	Business Analytics Research and Communications (Research and Communications II)	1
BAN 5733	Descriptive Business Analytics	3
BAN 5743	Predictive Business Analytics	3
BAN 5753	Advanced Business Analytics	3
MSIS 5503	Statistics for Data Science	3
MSIS 5193	Programming for Data Science and Analytics I	3
MSIS 5633	Predictive Analytics Technologies	3
Hours Subtotal		22
Required Option Courses		
BAN 5763	Advanced Marketing Research Analytics	3
MKTG 5253	Advanced SAS Programming for Marketing Analytics	3
Hours Subtotal		6
Electives		
<i>Required Option Electives</i>		
Select 6 hours from the following or other courses as approved by the program director.		6
MKTG 5133	Marketing Management	
BAN 5530	Consulting in Marketing Analytics	
BAN 5530	Consulting in Marketing Analytics	
BAN 5551	Optimization Applications in Marketing Analytics	
BAN 5561	Customer Lifetime Value Models in Marketing	
BAN 5511	Web Analytics and Digital Marketing	
BAN 5521	GIS Applications in Marketing Analytics	
ACCT 5183	MBA Financial Reporting	
Select 3 hours from the following or other courses as approved by program director.		3
BAN 5541	Using R in Marketing Analytics	
BAN 5563	Strategic Marketing and Business Analytics	
BAN 5900	Advanced Practicum in Business Analytics	
ECON 5113	Managerial Economics	
EEE 5863	CIE Scholar Practicum	
FIN 5013	Business Finance	
HCA 5013	Survey of Health Care Administration	

MKTG 5133	Marketing Management	
MKTG 5243	Base SAS Programming for Database Marketing	
MKTG 5253	Advanced SAS Programming for Marketing Analytics	
MSIS 5213	Information Assurance Management	
MSIS 5223	Programming for Data Science and Analytics II	
MSIS 5243	Information Technology Forensics	
MSIS 5303	Prescriptive Analytics	
MSIS 5663	Data Warehousing	
MSIS 5673	Descriptive Analytics and Visualization	
MSIS 5683	Big Data Advanced Analytics Technologies	
MSIS 5713	Scripting Essentials	
STAT 5013	Statistics for Experimenters I	
STAT 5053	Time Series Analysis	
STAT 5213	Bayesian Analysis	
Other courses as approved by program director.		
Hours Subtotal		9
Total Hours		37

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Chemical Engineering, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 30

Code	Title	Hours
Core Courses		
CHE 5123	Advanced Chemical Reaction Engineering	3
CHE 5213	Advanced Transport Phenomena	3
CHE 5743	Chemical Engineering Process Modeling	3
CHE 5843	Principles of Chemical Engineering Thermodynamics	3
CHE 5302	Introduction to Science and Engineering Research	2
Hours Subtotal		14
Seminar		
CHE 6010	Chemical Engineering Seminar	3
Hours Subtotal		3
Electives		
Graduate-approved elective (CHE or other) courses, selected by the student with the approval of the student's advisory committee.		7
Suggested Elective Courses		
CHE 5073	Tissue Engineering	
CHE 5133	Catalysis and Photocatalysis	
CHE 5283	Advanced Bioprocess Engineering	
CHE 5293	Advanced Biomedical Engineering	
CHE 5323	Electrochemical Engineering	
CHE 5373	Process Simulation	
CHE 5493	Molecular Modeling and Simulation	
CHE 5523	Colloid Processing	
CHE 5603	Membrane Separations	
CHE 5753	Applied Numerical Computing for Scientists and Engineers	
CHE 5773	Computational Fluid-Particle Dynamics	
Hours Subtotal		7
Thesis		
CHE 5000	Master's Thesis	6
Hours Subtotal		6
Total Hours		30

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Chemistry, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 30

Code	Title	Hours
Coursework		
CHEM 5001	Introduction to Chemistry Research	1
CHEM 5000	Thesis	6
CHEM 5011	Graduate Seminar	1
CHEM 6010	Research Seminar	5
Hours Subtotal		13
Electives		
Select 17 hours from the following:		17
CHEM 5053	Foundations of Physical Chemistry	
CHEM 5063	Foundations of Organic Chemistry	
CHEM 5073	Foundations of Analytical Chemistry	
CHEM 5263	Foundations of Inorganic Chemistry	
CHEM 5103	Physical and Chemical Separations	
CHEM 5223	Polymer Chemistry	
CHEM 5373	Spectrometric Identification of Organic Compounds	
CHEM 5443	Mechanism and Structure in Organic Chemistry	
CHEM 5563	Chemical Thermodynamics I	
CHEM 5963	Advanced Inorganic Chemistry	
CHEM 6103	Electroanalytical Chemistry	
CHEM 6223	Physical Polymer Science	
CHEM 6420	Special Topics in Organic Chemistry	
CHEM 6650	Selected Topics in Chemistry	
Hours Subtotal		17
Total Hours		30

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Civil Engineering, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 30

Code	Title	Hours
Core Courses		
Select 24 hours of approved graduate level coursework in consultation with the CIVE Graduate Coordinator (minimum of 18 hours at the 5000 level or higher)		24
Hours Subtotal		24
Research Hours		
CIVE 5000	Master's Thesis	6
Hours Subtotal		6
Total Hours		30

Creative Component Option

Total Hours: 32

Code	Title	Hours
Core Courses		
Select 30 hours of approved graduate level coursework in consultation with the CIVE Graduate Coordinator (minimum of 24 hours at the 5000 level or higher)		30
Hours Subtotal		30
Research Hours		
CIVE 5080	Engineering Problems	2
Hours Subtotal		2
Total Hours		32

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Communication Sciences and Disorders, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 57

Code	Title	Hours
Courses		
<i>Suggested Plan of Study</i>		
Fall - 1st Year		
CDIS 5013	Evidence-Based Practice	3
CDIS 5193	Motor Speech Disorders	3
CDIS 5143	Phonological Disorders	3
CDIS 5210	Advanced Practicum	3
Spring - 1st Year		
CDIS 5330	Voice and Resonance Disorders	4
CDIS 5153	Neurological Communication Disorders	3
CDIS 5113	Advanced Language Disorders in Children	3
CDIS 5210	Advanced Practicum	3
Summer - 1st Year		
CDIS 5210	Advanced Practicum	3
CDIS 5163	Dysphagia	3
CDIS 5422	Augmentative/Alternative Communication	2
Fall - 2nd Year		
CDIS 5163	Dysphagia	3
CDIS 5183	Traumatic Brain Injury and Dementia	3
CDIS 5210	Advanced Practicum	3
Spring - 2nd Year		
CDIS 5210	Advanced Practicum	3
CDIS 5243	Language and Literacy Disorders in School-Age and Adolescence	3
CDIS 5533	Autism Spectrum Disorder: Assessment & Intervention of Communication Deficits	3
Hours Subtotal		51
Thesis		
CDIS 5000	Masters Research & Thesis	6
Total Hours		57

Prerequisite Requirements

- Students with a Bachelor's Degree in a discipline other than communication sciences and disorders must complete 24 semester hours of prerequisite coursework before being admitted to the graduate program. These students should apply to the graduate school as a "Special Student (Non-Degree Seeking)." Prerequisite courses include CDIS 2223, CDIS 3313, CDIS 4313, CDIS 3203, CDIS 3123, CDIS 4023, CDIS 4423 and CDIS 3113. Check individual courses for grade requirements.

Non-Thesis Option

Total Hours: 51

Code	Title	Hours
Courses		
<i>Suggested Plan of Study</i>		
Fall - 1st Year		
CDIS 5013	Evidence-Based Practice	3
CDIS 5193	Motor Speech Disorders	3
CDIS 5143	Phonological Disorders	3
CDIS 5210	Advanced Practicum	3
Spring - 1st Year		
CDIS 5330	Voice and Resonance Disorders	4
CDIS 5153	Neurological Communication Disorders	3
CDIS 5113	Advanced Language Disorders in Children	3
CDIS 5210	Advanced Practicum	3
Summer - 1st Year		
CDIS 5210	Advanced Practicum	3
CDIS 5163	Dysphagia	3
CDIS 5422	Augmentative/Alternative Communication	2
Fall - 2nd Year		
CDIS 5163	Dysphagia	3
CDIS 5183	Traumatic Brain Injury and Dementia	3
CDIS 5210	Advanced Practicum	3
Spring - 2nd Year		
CDIS 5210	Advanced Practicum	3
CDIS 5243	Language and Literacy Disorders in School-Age and Adolescence	3
CDIS 5533	Autism Spectrum Disorder: Assessment & Intervention of Communication Deficits	3
Total Hours		51

Prerequisite Requirements

- Students with a Bachelor's Degree in a discipline other than communication sciences and disorders must complete 24 semester hours of prerequisite coursework before being admitted to the graduate program. These students should apply to the graduate school as a "Special Student (Non-Degree Seeking)." Prerequisite courses include CDIS 2223, CDIS 3313, CDIS 4313, CDIS 3203, CDIS 3123, CDIS 4023, CDIS 4423, and CDIS 3113. Check individual courses for grade requirements.

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Computer Science, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 30

Code	Title	Hours
Core Courses		
CS 5113	Computer Organization and Architecture	3
CS 5313	Formal Language Theory	3
CS 5323	Design and Implementation of Operating Systems II	3
CS 5413	Data Structures and Algorithm Analysis II	3
Hours Subtotal		12
Elective Courses		
Select 12 hours, 9 of which must be CS:		12
Hours Subtotal		12
Thesis		
Select 6 hours:		6
Hours Subtotal		6
Total Hours		30

Non-Thesis Option

Total Hours: 33

Code	Title	Hours
Core Courses		
CS 5113	Computer Organization and Architecture	3
CS 5313	Formal Language Theory	3
CS 5323	Design and Implementation of Operating Systems II	3
CS 5413	Data Structures and Algorithm Analysis II	3
Hours Subtotal		12
Elective Courses		
Select 21 hours, 15 of which must be CS:		21
Hours Subtotal		21
Total Hours		33

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Counseling: Mental Health Counseling, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis

Total Hours: 66

Code	Title	Hours
Counseling Core		
CPSY 5453	Vocational and Career Information	3
CPSY 5473	Basic Counseling Skills ¹	3
CPSY 5493	Professional and Ethical Issues in Counseling	3
CPSY 5503	Multicultural Counseling	3
CPSY 5553	Theories of Counseling ¹	3
CPSY 5563	Conceptualization and Diagnosis in Counseling	3
CPSY 5583	Group Process	3
CPSY 6323	Psychological Consultation	3
CPSY 6553	Advanced Practice in Marital and Family Treatment	3
EPSY 5103	Human Development in Psychology	3
Hours Subtotal		30
Research		
REMS 5013	Research Design and Methodology	3
REMS 5953	Statistical Methods in Education	3
Hours Subtotal		6
Counseling Practice		
CPSY 5593	Counseling Practicum ²	3
CPSY 5683	Internship In Counseling I	3
CPSY 5693	Internship In Counseling II	3
Hours Subtotal		9
Community Counseling Specialization		
CPSY 5483	Mental Health Counseling	3
CPSY 5523	Assessment in Counseling ³	3
CPSY 5673	Substance Abuse Counseling	3
<i>Electives</i>		
Select 6 credit hours, to be chosen from a list of courses approved by the state board for licensure). ⁴		6
Hours Subtotal		15
Thesis		
CPSY 5000	Master's Thesis	6
Hours Subtotal		6
Total Hours		66

¹ Prerequisite for CPSY 5593.

² Prerequisite for CPSY 5683/5693.

³ Prerequisite for either REMS 5373 or EPSY 5783.

⁴ Among the courses listed are CPSY 5323, CPSY 6223, CPSY 5663, CPSY 5173, CPSY 5533, and SPSY 5783.

Non-Thesis

Total Hours: 60

Code	Title	Hours
Counseling Core		
CPSY 5453	Vocational and Career Information	3
CPSY 5473	Basic Counseling Skills ¹	3
CPSY 5493	Professional and Ethical Issues in Counseling	3
CPSY 5503	Multicultural Counseling	3
CPSY 5553	Theories of Counseling ¹	3
CPSY 5563	Conceptualization and Diagnosis in Counseling	3
CPSY 5583	Group Process	3
CPSY 6323	Psychological Consultation	3
CPSY 6553	Advanced Practice in Marital and Family Treatment	3
EPSY 5103	Human Development in Psychology	3
Hours Subtotal		30
Research		
REMS 5013	Research Design and Methodology	3
REMS 5953	Statistical Methods in Education	3
Hours Subtotal		6
Counseling Practice		
CPSY 5593	Counseling Practicum ²	3
CPSY 5683	Internship In Counseling I	3
CPSY 5693	Internship In Counseling II	3
Hours Subtotal		9
Community Counseling Specialization		
CPSY 5483	Mental Health Counseling	3
CPSY 5523	Assessment in Counseling ³	3
CPSY 5673	Substance Abuse Counseling	3
<i>Electives</i>		
Select 6 credit hours, to be chosen from a list of courses approved by the state board for licensure). ⁴		6
Hours Subtotal		15
Total Hours		60

¹ Prerequisite for CPSY 5593.

² Prerequisite for CPSY 5683/5693.

³ Prerequisite for either REMS 5373 or EPSY 5783.

⁴ Among the courses listed are CPSY 5323, CPSY 6223, CPSY 5663, CPSY 5173, CPSY 5533, and SPSY 5783.

Counseling: Mental Health Counseling Requirements

- Complete a minimum of 60 graduate credit hours of coursework for the Mental Health Counseling Option and 57 hours of coursework for the School Counseling Option.
- Nine (9) credit hours may be transferred from other recognized graduate programs. Tulsa students may transfer up to fifteen (15) credit hours from the University of Oklahoma-Tulsa campus.

- The last eight (8) hours must be taken at Oklahoma State University and taken for resident credit.
- As least 24 credit hours must be in 5000 level courses or above. (Students who choose to write a master's thesis for 6 credit hours must take at least 22 credit hours of 5000 level courses.) 4000 level courses taken for graduate credit will not be approved by the Oklahoma licensing board for professional counselors.
- A minimum overall grade point average of 3.00 is required in all academic coursework.
- A grade of B or better must be earned in CPSY 5473, 5553, 5593, and 5683/5693. Students who earn a grade below a B in any of these courses will be required to repeat the course or may be suspended from the program. Students will only be allowed to repeat a course one time to earn a higher grade.

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Counseling: School Counseling, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 63

Code	Title	Hours
Counseling Core		
CPSY 5453	Vocational and Career Information	3
CPSY 5473	Basic Counseling Skills ¹	3
CPSY 5493	Professional and Ethical Issues in Counseling	3
CPSY 5503	Multicultural Counseling	3
CPSY 5553	Theories of Counseling ¹	3
CPSY 5563	Conceptualization and Diagnosis in Counseling	3
CPSY 5583	Group Process	3
CPSY 6323	Psychological Consultation	3
CPSY 6553	Advanced Practice in Marital and Family Treatment	3
EPSY 5103	Human Development in Psychology	3
Hours Subtotal		30
Research		
REMS 5013	Research Design and Methodology	3
REMS 5953	Statistical Methods in Education	3
Hours Subtotal		6
School Counseling Specialization		
CPSY 5533	Foundations of Play Therapy	3
CPSY 5513	Comprehensive School Counseling Programs	3
CPSY 5413	Child and Adolescent Counseling	3
CPSY 5523	Assessment in Counseling	3
Hours Subtotal		12
Counseling Practice		
CPSY 5593	Counseling Practicum	3
CPSY 5683	Internship In Counseling I	3
CPSY 5693	Internship In Counseling II	3
Hours Subtotal		9
Total Hours		57
Thesis		
CPSY 5000	Master's Thesis	6
Hours Subtotal		15
Total Hours		63

¹ Prerequisite for CPSY 5593.

Non-Thesis Option

Total Hours: 57

Code	Title	Hours
Counseling Core		
CPSY 5453	Vocational and Career Information	3
CPSY 5473	Basic Counseling Skills ¹	3

CPSY 5493	Professional and Ethical Issues in Counseling	3
CPSY 5503	Multicultural Counseling	3
CPSY 5553	Theories of Counseling ¹	3
CPSY 5563	Conceptualization and Diagnosis in Counseling	3
CPSY 5583	Group Process	3
CPSY 6323	Psychological Consultation	3
CPSY 6553	Advanced Practice in Marital and Family Treatment	3
EPSY 5103	Human Development in Psychology	3
Hours Subtotal		30
Research		
REMS 5013	Research Design and Methodology	3
REMS 5953	Statistical Methods in Education	3
Hours Subtotal		6
School Counseling Specialization		
CPSY 5533	Foundations of Play Therapy	3
CPSY 5513	Comprehensive School Counseling Programs	3
CPSY 5413	Child and Adolescent Counseling	3
CPSY 5523	Assessment in Counseling	3
Hours Subtotal		12
Counseling Practice		
CPSY 5593	Counseling Practicum	3
CPSY 5683	Internship In Counseling I	3
CPSY 5693	Internship In Counseling II	3
Hours Subtotal		9
Total Hours		57

¹ Prerequisite for CPSY 5593.

Counseling: School Counseling Requirements

- Complete a minimum of 60 graduate credit hours of coursework for the Mental Health Counseling Option and 57 hours of coursework for the School Counseling Option.
- Nine (9) credit hours may be transferred from other recognized graduate programs. Tulsa students may transfer up to fifteen (15) credit hours from the University of Oklahoma-Tulsa campus.
- The last eight (8) hours must be taken at Oklahoma State University and taken for resident credit.
- As least 24 credit hours must be in 5000 level courses or above. (Students who choose to write a master's thesis for 6 credit hours must take at least 22 credit hours of 5000 level courses.) 4000 level courses taken for graduate credit will not be approved by the Oklahoma licensing board for professional counselors.
- A minimum overall grade point average of 3.00 is required in all academic coursework.
- A grade of B or better must be earned in CPSY 5473, 5553, 5593, and 5683/5693. Students who earn a grade below a B in any of these courses will be required to repeat the course or may be suspended from the program. Students will only be allowed to repeat a course one time to earn a higher grade.

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Design, Housing & Merchandising: Apparel Design and Production, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Research Thesis Option

Total Hours: 30

Code	Title	Hours
Core Courses		
DHM 5001	Orientation to Graduate Studies in Design, Housing and Merchandising	1
DHM 5013	Research Developments in Design, Housing and Merchandising	3
DHM 5112	Research Planning and Proposal Writing	2
Required Non-Core Courses		
DHM 5003	Theoretical Perspectives for Design, Housing and Merchandising	3
STAT 5013	Statistics for Experimenters I	3
DHM 5000	Master's Thesis	6
Hours Subtotal		18
Electives		
Select from any of the following (9 credits of which must be in DHM):		12
DHM 4573	Sustainable Design for Apparel and Interiors	
DHM 5113	Theories of Creative Process in Design and Merchandising	
DHM 5233	Design Evaluation	
DHM 5303	Sociological, Psychological and Economic Aspects of Consumer Behavior	
DHM 5343	Applied Sensation, Perception and Behavioral Psychology in DHM	
DHM 5440	Career Internship	
DHM 5533	Theory and Design of Functional Apparel	
Hours Subtotal		12
Total Hours		30

Design Thesis Option

Total Hours: 30

Code	Title	Hours
Core Courses		
DHM 5001	Orientation to Graduate Studies in Design, Housing and Merchandising	1
DHM 5013	Research Developments in Design, Housing and Merchandising	3
DHM 5112	Research Planning and Proposal Writing	2
Required Non-Core Courses		
DHM 5000	Master's Thesis	6
DHM 5003	Theoretical Perspectives for Design, Housing and Merchandising	3

DHM 5113	Theories of Creative Process in Design and Merchandising	3
DHM 5233	Design Evaluation	3
Hours Subtotal		21
Electives		
Select from any of the following (6 credits of which must be in DHM):		9
DHM 4573	Sustainable Design for Apparel and Interiors	
DHM 5303	Sociological, Psychological and Economic Aspects of Consumer Behavior	
DHM 5343	Applied Sensation, Perception and Behavioral Psychology in DHM	
DHM 5440	Career Internship	
DHM 5533	Theory and Design of Functional Apparel	
STAT 5013	Statistics for Experimenters I	
Hours Subtotal		9
Total Hours		30

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Design, Housing & Merchandising: Interior Design, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Research Thesis Option

Total Hours: 30

Code	Title	Hours
DHM Core		
DHM 5001	Orientation to Graduate Studies in Design, Housing and Merchandising	1
DHM 5013	Research Developments in Design, Housing and Merchandising	3
DHM 5112	Research Planning and Proposal Writing	2
Hours Subtotal		6
Other Requirements (Non-Core)		
DHM 5000	Master's Thesis	6
DHM 5003	Theoretical Perspectives for Design, Housing and Merchandising	3
DHM 5113	Theories of Creative Process in Design and Merchandising	3
DHM 5343	Applied Sensation, Perception and Behavioral Psychology in DHM	3
DHM 5353	Graduate Interior Design Studio	3
STAT 5013	Statistics for Experimenters I	3
Hours Subtotal		21
Electives		
Choose 3 hours from the following:		3
DHM 5233	Design Evaluation	
DHM 5440	Career Internship	
DHM 4373	Advanced Computer-Aided Design for Interior Design ¹	
Or appropriate related course from outside of DHM (note: interdisciplinary courses such as gerontology, hospitality, merchandising, etc. are encouraged).		
Hours Subtotal		3
Total Hours		30

Design Thesis Option

Total Hours: 30

Code	Title	Hours
DHM Core		
DHM 5001	Orientation to Graduate Studies in Design, Housing and Merchandising	1
DHM 5013	Research Developments in Design, Housing and Merchandising	3
DHM 5112	Research Planning and Proposal Writing	2
Hours Subtotal		6
Other Requirements (Non-Core)		
DHM 5000	Master's Thesis	6

DHM 5113	Theories of Creative Process in Design and Merchandising	3
DHM 5233	Design Evaluation	3
DHM 5343	Applied Sensation, Perception and Behavioral Psychology in DHM	3
DHM 5353	Graduate Interior Design Studio	3
Hours Subtotal		18
Electives		
Choose 6 hours from the following:		6
DHM 4573	Sustainable Design for Apparel and Interiors ¹	
DHM 5003	Theoretical Perspectives for Design, Housing and Merchandising	
DHM 5440	Career Internship	
STAT 5013	Statistics for Experimenters I	
Or appropriate related course from outside of DHM (note: interdisciplinary courses such as gerontology, hospitality, merchandising, etc. are encouraged).		
Hours Subtotal		6
Total Hours		30

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Design, Housing & Merchandising: Merchandising, MS

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 30

Code	Title	Hours
DHM Core		
DHM 5001	Orientation to Graduate Studies in Design, Housing and Merchandising	1
DHM 5013	Research Developments in Design, Housing and Merchandising	3
DHM 5112	Research Planning and Proposal Writing	2
Hours Subtotal		6
Other Requirements (Non-Core)		
DHM 5003	Theoretical Perspectives for Design, Housing and Merchandising	3
STAT 5013	Statistics for Experimenters I	3
DHM 5000	Master's Thesis	6
Hours Subtotal		12
Electives		
Select 12 hours from the following, 9 of which must be in DHM:		12
DHM 4573	Sustainable Design for Apparel and Interiors	
DHM 5113	Theories of Creative Process in Design and Merchandising	
DHM 5303	Sociological, Psychological and Economic Aspects of Consumer Behavior	
DHM 5343	Applied Sensation, Perception and Behavioral Psychology in DHM	
DHM 5440	Career Internship	
DHM 5643	Promotional Strategies in Merchandising	
DHM 5653	Merchandising Trends, Practices and Theories in Apparel and Interior Industries	
DHM 5663	International Merchandising Management	
DHM 6403	Merchandising Theory Application and Strategy Implementation	
DHM 6463	Project Management	
DHM 5643	Promotional Strategies in Merchandising	
Or appropriate related courses outside of DHM, such as gerontology, hospitality, business, etc.		
Hours Subtotal		12
Total Hours		30

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Dietetics, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 36

Code	Title	Hours
Core Requirements		
STAT 5013 or NSCI 5603	Statistics for Experimenters I Statistical Methods in Dietetics	3
NSCI 5123	Research Methods in Nutritional Sciences	3
NSCI 5963	Environmental Scanning and Analysis	3
NSCI 5033	Macronutrients in Human Nutrition	3
NSCI 5043	Micronutrients in Human Nutrition	3
NSCI 5843	Non-thesis Graduate Capstone	3
Hours Subtotal		18
Elective Courses		
Select 18 hours from the following:		18
NSCI 5013	Financial Management and Cost Controls in Dietetics	
NSCI 5053	Functional Foods for Chronic Disease Prevention	
NSCI 5103	Grant Writing for the Professional	
NSCI 5133	Advanced Nutrition for Exercise and Sport	
NSCI 5203	Nutrition in Wellness	
NSCI 5213	Entrepreneurship in Food Service and Dietetics	
NSCI 5223	Advanced Nutrition Across the Life Span	
NSCI 5240	Contemporary Issues in Nutrition	
NSCI 5313	Dietary and Herbal Supplements	
NSCI 5323	Nutrition and Physical Activity in Aging	
NSCI 5363	Maternal and Child Nutrition	
NSCI 5373	Childhood Nutrition	
NSCI 5443	Nutrigenomics and Nutrigenetics	
NSCI 5543	Obesity Prevention Across the Lifespan	
NSCI 5553	Global Nutrition and Food Security	
NSCI 5613	Advanced Nutrition Education and Counseling	
NSCI 5643	Advanced Medical Nutrition Therapy	
NSCI 5683	Fundamentals of Leadership in Dietetics	
NSCI 5713	Advanced Community Nutrition	
NSCI 5753	Health Care Administration	
NSCI 5913	Nutritional Epidemiology	
NSCI 6033	Phytochemicals	
NSCI 6223	Nutrition in Immunology	
NSCI 6243	Nutrition and Cancer	
NSCI 6643	Clinical Aspects of Nutrition Support	
Hours Subtotal		18
Total Hours		36

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Economics, MS

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 33

Code	Title	Hours
Degree Core		
<i>Required Courses</i>		
ECON 5033	Macroeconomic Analysis	3
ECON 5213	Introduction to Econometrics	3
ECON 6013	Microeconomic Theory I	3
ECON 6213	Econometrics I	3
ECON 6323	Mathematical Economics I	3
Hours Subtotal		15
Electives		
Select 15 hours		15
Suggested Electives:		
AGEC 5053	Environmental Economics and Resource Development	
AGEC 5113	Applications of Mathematical Programming	
AGEC 5503	Economics of Natural and Environmental Resource Policy	
AGEC 5723	Plan & Pol Devlpmnt	
ECON 5733	Energy Economics: Traditional and Renewable Energy Markets	
ECON 6033	Macroeconomic Theory I	
STAT 5023	Statistics for Experimenters II	
STAT 5053	Time Series Analysis	
Hours Subtotal		15
Other Requirements		
ECON 5003	Research Report	3
Hours Subtotal		3
Total Hours		33

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Educational Leadership Studies: College Student Development, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 36

Code	Title	Hours
Required Core		
HESA 5173	Introduction to Student Affairs	3
HESA 5213	Student Development Theory	3
HESA 5320	Seminar in Student Development	3
HESA 5463	Legal Issues in Student Affairs	3
HESA 5813	Leadership Theory and Ethical Decision Making in Higher Education	3
HESA 6243	Internship in Higher Education and Student Affairs I	3
HESA 6253	Internship in Higher Education and Student Affairs II	3
HESA 6583	The Impact of College on Students and Society	3
Hours Subtotal		24
Assessment Core		
HESA 5343	Assessment Techniques for Higher Education and Student Affairs Professionals	3
HESA 5653	Research to Practice in Higher Education and Student Affairs	3
Hours Subtotal		6
Capstone		
HESA 5903	Capstone in Higher Education and Student Affairs	3
Hours Subtotal		3
Electives¹		
Select 3 hours from the following:		3
HESA 5223	Career Development for College Students	
HESA 5953	Organizational Development for Higher Education	
HESA 5973	Foundations of Higher Education	
HESA 5983	Administrative Issues in Higher Education	
HESA 6163	International Issues in Higher Education	
HESA 6233	Critical Issues in Higher Education and Student Affairs	
HESA 6703	Finance in Higher Education	
HESA 6733	Planning and Educational Change	
EPSY 5103	Human Development in Psychology	
EPSY 6533	Human Motivation	
SCFD 6983	Diversity and Equity Issues in Education	
Hours Subtotal		3
Total Hours		36

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

¹ And other courses approved by graduate advisory committee.

Educational Leadership Studies: Higher Education, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 36
(Degree program is online only)

Code	Title	Hours
Required Core		
HESA 5213	Student Development Theory	3
HESA 5813	Leadership Theory and Ethical Decision Making in Higher Education	3
HESA 5953	Organizational Development for Higher Education	3
HESA 5973	Foundations of Higher Education	3
HESA 6233	Critical Issues in Higher Education and Student Affairs	3
HESA 6243	Internship in Higher Education and Student Affairs I	3
HESA 6583	The Impact of College on Students and Society	3
Hours Subtotal		21
Assessment Core		
HESA 5343	Assessment Techniques for Higher Education and Student Affairs Professionals	3
HESA 5653	Research to Practice in Higher Education and Student Affairs	3
Hours Subtotal		6
Capstone		
HESA 5903	Capstone in Higher Education and Student Affairs	3
Hours Subtotal		3
Elective Courses¹		
Select 6 hours from the following:		6
HESA 5983	Administrative Issues in Higher Education	
HESA 6683	The Community Junior College	
HESA 6733	Planning and Educational Change	
EPSY 5103	Human Development in Psychology	
EPSY 5463	Psychology of Learning	
EPSY 5473	Psychology of Adult Learning	
EPSY 5553	Motivation in Educational Contexts	
EDTC 5053	Learning in a Digital Age	
EDTC 5153	Computer-Based Instruction Development	
EDTC 5203	Foundations of Educational Technologies	
EDTC 5503	Facilitating Online Learning	
Hours Subtotal		6
Total Hours		36

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

¹ And other courses approved by graduate advisory committee.

Educational Leadership Studies: School Administration, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 36

Code	Title	Hours
Common Core		
EDLE 5813	Leadership Theory and Ethical Decision Making	3
EDLE 5953	Developing Educational Organizations	3
Hours Subtotal		6
Emphasis Core		
EDLE 5253	The Principalship	3
EDLE 5723	Education Law	3
EDLE 5323	School Finance	3
EDLE 5473	Supervision of Instruction	3
EDLE 5883	Field Studies Internship I	3
EDLE 5893	Field Studies Intern II	3
Hours Subtotal		18
Research and Inquiry		
Select 6 hours from the following:		6
REMS 5013	Research Design and Methodology	
REMS 5953	Statistical Methods in Education	
SCFD 5913	Introduction to Qualitative Inquiry	
Hours Subtotal		6
Option Electives		
Select 6 hours from the following:		6
(Alternate courses may be approved by the student's advisor)		
CIED 5053	Curriculum Issues	
CIED 5623	Multicultural and Diversity Issues in Curriculum	
SCFD 5883	Educational Sociology	
SCFD 5873	Culture, Society and Education	
SCFD 5990	Problems and Issues in Social Foundations	
SPED 5633	Behavior Characteristics of Exceptional Individuals	
SPED 5993	Culturally Responsive Teaching in Special Education	
REMS 5373	Educational Measurements	
EDTC 5103	Advanced Computing Applications in Education	
EDTC 5720	Educ Workshop	
Hours Subtotal		6

Required Creative Component: Portfolio

The Portfolio, designed and completed by Candidates to exhibit competency in the ELCC Standards, serves as the required Creative Component for the MS degree in School Administration; satisfactory completion of the Portfolio is required for degree completion and recommendation for certification.

Total Hours

36

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Educational Psychology, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis

Total Hours: 36

Code	Title	Hours
Degree Core		
Select two of the following courses:		6
EPSY 5103	Human Development in Psychology	
EPSY 5463	Psychology of Learning	
EPSY 5553	Motivation in Educational Contexts	
Hours Subtotal		6
Research and Measurement		
REMS 5013	Research Design and Methodology	3
REMS 5953	Statistical Methods in Education	3
Hours Subtotal		6
Program Core		
Select the remaining course from the Degree Core for three hours.		3
Select 15 hours from the following:		15
EPSY 5320	Seminar in Educational Psychology	
EPSY 5403	Issues in Adolescent Development	
EPSY 5473	Psychology of Adult Learning	
EPSY 5603	Developmental Issues in Instruction	
EPSY 5663	Creativity for Teachers	
EPSY 5963	Developing Resources to Support Educational Programs	
EPSY 5983	Instructional Effectiveness in Higher Education	
Hours Subtotal		18
Thesis Option		
EPSY 5000	Master's Thesis	6
Hours Subtotal		6
Total Hours		36

Creative Component

Total Hours: 36

Code	Title	Hours
Degree Core		
Select two of the following courses:		6
EPSY 5103	Human Development in Psychology	
EPSY 5463	Psychology of Learning	
EPSY 5553	Motivation in Educational Contexts	
Hours Subtotal		6
Research and Measurement		
REMS 5013	Research Design and Methodology	3
REMS 5953	Statistical Methods in Education	3
Hours Subtotal		6
Program Core		

Select the remaining course from the Degree Core for three hours.		3
Select 15 hours from the following:		15
EPSY 5403	Issues in Adolescent Development	
EPSY 5473	Psychology of Adult Learning	
EPSY 5603	Developmental Issues in Instruction	
EPSY 5663	Creativity for Teachers	
EPSY 5963	Developing Resources to Support Educational Programs	
EPSY 5983	Instructional Effectiveness in Higher Education	

Hours Subtotal **18**

Creative Component Option

EPSY 5320	Seminar in Educational Psychology	3
Select three hours of electives.		3

Hours Subtotal **6**

Total Hours **36**

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Educational Psychology: Educational Psychology, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 36

Code	Title	Hours
Degree Core		
Select 6 hours from the following:		6
EPSY 5103	Human Development in Psychology	
EPSY 5463	Psychology of Learning	
EPSY 5553	Motivation in Educational Contexts	
Hours Subtotal		6
Research and Measurement		
REMS 5013	Research Design and Methodology	3
REMS 5953	Statistical Methods in Education	3
Hours Subtotal		6
Program Core		
Select 3 hours from EPSY 5103, EPSY 5463, EPSY 5553, whichever was not used as part of Degree Core:		3
Select 15 hours from the following:		15
FDEP 5183	Theories of Social Psychology	
EPSY 5320	Seminar in Educational Psychology	
EPSY 5403	Issues in Adolescent Development	
EPSY 5473	Psychology of Adult Learning	
EPSY 5603	Developmental Issues in Instruction	
EPSY 5663	Creativity for Teachers	
EPSY 5963	Developing Resources to Support Educational Programs	
EPSY 5983	Instructional Effectiveness in Higher Education	
Hours Subtotal		18
Thesis		
EPSY 5000	Master's Thesis (6 hours, required)	6
Hours Subtotal		6
Total Hours		36

Non-Thesis Option

Total Hours: 36

Code	Title	Hours
Degree Core		
Select 6 hours from the following:		6
EPSY 5103	Human Development in Psychology	
EPSY 5463	Psychology of Learning	
EPSY 5553	Motivation in Educational Contexts	
Hours Subtotal		6
Research and Measurement		
REMS 5013	Research Design and Methodology	3

REMS 5953	Statistical Methods in Education	3
Hours Subtotal		6
Program Core		
Select 3 hours from EPSY 5103, EPSY 5463, EPSY 5553, whichever was not used as part of Degree Core:		3
Select 15 hours from the following:		15
FDEP 5183	Theories of Social Psychology	
EPSY 5320	Seminar in Educational Psychology	
EPSY 5403	Issues in Adolescent Development	
EPSY 5473	Psychology of Adult Learning	
EPSY 5603	Developmental Issues in Instruction	
EPSY 5663	Creativity for Teachers	
EPSY 5963	Developing Resources to Support Educational Programs	
EPSY 5983	Instructional Effectiveness in Higher Education	
Hours Subtotal		18
Creative Component		
Select 6 hours of electives from the emphasis area with the development of a Creative Component. Related elective coursework is determined by the student with committee members.		6
Hours Subtotal		6
Total Hours		36

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Educational Psychology: Research, Evaluation, Measurement and Statistics, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 36

Code	Title	Hours
Inquiry Core		
REMS 5013	Research Design and Methodology	3
REMS 5953	Statistical Methods in Education	3
REMS 5373	Educational Measurements	3
REMS 6003	Analyses of Variance	3
REMS 6013	Multiple Regression Analysis in Behavioral Studies	3
REMS 6373	Program Evaluation	3
SCFD 5913	Introduction to Qualitative Inquiry	3
Hours Subtotal		21
Educational Psychology Degree Core		
EPSY 5103	Human Development in Psychology	3
EPSY 5463	Psychology of Learning	3
Hours Subtotal		6
Inquiry Elective		
Select 3 hours from the following:		3
REMS 5373	Educational Measurements	
REMS 5963	Computer Applications in Nonparametric Data Analyses	
REMS 6033	Factor Analysis in Behavioral Research	
REMS 6663	Applied Multivariate Research in Behavioral Studies	
REMS 6673	Item Response Theory	
REMS 6683	Multilevel Modeling Methods in Education	
REMS 6693	Structural Equation Modeling for Behavioral and Educational Research	
Hours Subtotal		3
Comprehensive Exams		
Upon completion of coursework and having an approved dissertation proposal, students must pass a qualifying examination.		
Thesis		
REMS 5000	Master's Thesis	6
Hours Subtotal		6
Total Hours		36

Report Option

Total Hours: 36

Code	Title	Hours
Inquiry Core		
REMS 5013	Research Design and Methodology	3
REMS 5953	Statistical Methods in Education	3
REMS 5373	Educational Measurements	3
REMS 6003	Analyses of Variance	3
REMS 6013	Multiple Regression Analysis in Behavioral Studies	3
REMS 6373	Program Evaluation	3
SCFD 5913	Introduction to Qualitative Inquiry	3
Hours Subtotal		21
Educational Psychology Degree Core		
EPSY 5103	Human Development in Psychology	3
EPSY 5463	Psychology of Learning	3
Hours Subtotal		6
Inquiry Elective		
Select 3 hours from the following:		3
REMS 5373	Educational Measurements	
REMS 5963	Computer Applications in Nonparametric Data Analyses	
REMS 6033	Factor Analysis in Behavioral Research	
REMS 6663	Applied Multivariate Research in Behavioral Studies	
REMS 6673	Item Response Theory	
REMS 6683	Multilevel Modeling Methods in Education	
REMS 6693	Structural Equation Modeling for Behavioral and Educational Research	
Hours Subtotal		3
Comprehensive Exams		
Upon completion of coursework and having an approved dissertation proposal, students must pass a qualifying examination.		
Report with Electives		
Select one of the following options:		6
Option 1 - 2 hours of thesis plus 4 hours or related electives		
Option 2 - Development of a Creative Component with Related Elective coursework (elective options are specified within the curriculum requirements for each program).		
Hours Subtotal		6
Total Hours		36

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Educational Psychology: School Psychometrics, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 37

Code	Title	Hours
Required Courses		
SPSY 5023	Introduction to School Psychology	3
SPSY 5113	Developmental Psychopathology	3
EPSY 5103	Human Development in Psychology	3
REMS 5013	Research Design and Methodology	3
EDHS 5910	Educational and Human Sciences Field Experiences	2
SPSY 5793	Individual Intellectual Assessment of Children and Youth	3
REMS 5953	Statistical Methods in Education	3
SPSY 6313	Advanced Interventions for Increased Academic Achievement	3
SPSY 5803	Advanced Cognitive Assessment and Theory	3
SPSY 5210	Introductory Practicum in School Psychology	2
SPSY 6333	Instructional Assessment and Consultation	3
EPSY 5000	Master's Thesis	6
Total Hours		37

Formal Report Option

Total Hours: 37

Code	Title	Hours
Required Courses		
SPSY 5023	Introduction to School Psychology	3
SPSY 5113	Developmental Psychopathology	3
EPSY 5103	Human Development in Psychology	3
REMS 5013	Research Design and Methodology	3
EDHS 5910	Educational and Human Sciences Field Experiences	2
SPSY 5793	Individual Intellectual Assessment of Children and Youth	3
REMS 5953	Statistical Methods in Education	3
SPSY 6313	Advanced Interventions for Increased Academic Achievement	3
SPSY 5803	Advanced Cognitive Assessment and Theory	3
SPSY 5210	Introductory Practicum in School Psychology	2
SPSY 6333	Instructional Assessment and Consultation	3
EPSY 5000	Master's Thesis	2
Select 4 hours of electives		4

Formal Report also required

Total Hours

37

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Educational Technology: Educational Technology, MS

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 36

Code	Title	Hours
Common Core		
EDTC 5103	Advanced Computing Applications in Education ¹	3
EDTC 5203	Foundations of Educational Technologies	3
EDTC 5753	Introduction to Instructional Design	3
Hours Subtotal		9
Research and Inquiry		
REMS 5013	Research Design and Methodology	3
Hours Subtotal		3
Option - Educational Technology		
EDTC 5153	Computer-Based Instruction Development ¹	3
EDTC 5403	Creativity and Innovation in Educational Technology	3
EDTC 5503	Facilitating Online Learning ¹	3
EDTC 5053	Learning in a Digital Age ¹	3
EDTC 5113	Digital Media Production for Instruction	3
Hours Subtotal		15
Electives or Thesis		
Select 9 hours		9
<i>Suggested Courses</i>		
EDTC 5303	Digital Games and Simulations in the Classroom	
EDTC 5783	Learning and Teaching with Mobile Devices	
EDTC 5793	Design-Based Research	
LBSC 5613	Library Networks and Databases	
EPSY 5463	Psychology of Learning	
EPSY 5473	Psychology of Adult Learning	
REMS 5953	Statistical Methods in Education (OR)	
EDTC 5000	Master's Report or Thesis	
Hours Subtotal		9
Total Hours		36

¹ These four courses count toward the Graduate Certificate in Online Teaching. It is necessary to apply separately for the certificate in addition to the M.S. in Ed Tech. See edtech.okstate.edu/gradcert.

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Educational Technology: School Library Media, MS

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 36

Code	Title	Hours
Common Core		
EDTC 5203	Foundations of Educational Technologies	3
EDTC 5103	Advanced Computing Applications in Education	3
EDTC 5753	Introduction to Instructional Design	3
Hours Subtotal		9
Research and Inquiry Requirement		
REMS 5013	Research Design and Methodology	3
(If a substitution is approved for this course, you must complete RCR modules and send printed certificate to the COE Graduate Studies office.)		
Hours Subtotal		3
Option Area - School Library Media		
LBSC 5113	Selection and Organization of Informational and Educational Resources	3
LBSC 5613	Library Networks and Databases	3
LBSC 5823	Administration of School Library Media and Technology Programs	3
CIED 5353	Literature for Children, Adolescents and Adults	3
CIED 5443	Teaching Reading with Literature	3
Hours Subtotal		15
Electives		
EDTC 5113	Digital Media Production for Instruction	3
EDTC 5303	Digital Games and Simulations in the Classroom	3
EDTC 5403	Creativity and Innovation in Educational Technology	3
Other (consult your advisor for permission to substitute classes)		
Hours Subtotal		9
Total Hours		36

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Electrical Engineering, MEN

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 33

Code	Title	Hours
ECEN Graduate Level Courses		
	Select 24 hours of 5000-level or higher courses.	24
	May include up to 9 hours of ECEN 5080 with approval of the student's graduate advisory committee. ¹	
	A maximum of three credit hours of ECEN 5070 may be included on a Plan of Study with approval of the advisory committee.	
	ECEN 5000, ECEN 5030, ECEN 6050, and ENGL 4893 may not be applied to the MEngEE Plan of Study.	
Additional Courses		
	May include non-ECEN, math, science, or engineering graduate-level courses with approval of the student's graduate advisory committee.	9
Total Hours		33

¹ ECEN 4xxx courses approved for graduate credit completed in the Spring 2020 semester or earlier are equivalent to ECEN 5080 in the Plan of Study.

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Electrical Engineering, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 30¹

Code	Title	Hours
ECEN Graduate Level Courses		
	Students in the MSEE degree program are required to take courses in at least two areas of ECEN at the 5000-level or above. Up to three credit hours of ECEN 5070 and six credit hours of ECEN 5080 may be included on the MSEE Plan of Study with approval of the advisory committee. ¹	21
ECEN 5000	Thesis ECEN 5030, ECEN 6050, and ENGL 4893 may not be applied to the MS Plan of Study.	6
Additional Courses		
	May include non-ECEN, math, science, or engineering graduate-level courses with approval of the student's graduate advisory committee.	3
Total Hours		30

¹ ECEN 4xxx courses approved for graduate credit completed in the Spring 2020 semester or earlier are equivalent to ECEN 5070 in the Plan of Study.

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Engineering and Technology Management, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 32

Code	Title	Hours
Degree Core		
ETM 5111	Introduction to Strategy, Technology and Integration	1
ETM 5511	Capstone Preparation	1
ETM 5133	Capstone to Strategy, Technology and Integration	3
ETM 5143	Strategic Decision Analysis for Engineering and Technology Managers	3
Hours Subtotal		8
Electives		
Select 24 hours from the following:		24
ETM 5221	Engineering Teaming	
ETM 5241	Strategic Project Management	
ETM 5291	Failure Mode and Effects Analysis in Design	
ETM 5341	Leadership Strategies for Technical Professionals	
ETM 5351	Planning Technical Projects	
ETM 5371	Ethics for Practicing Engineers	
ETM 5391	New Product Introduction and Commercialization	
ETM 5411	Engineering Economic Analysis	
ETM 5461	Intellectual Property Management	
ETM 5481	Sustainable Enterprise Strategies	
ETM 5531	Contract Law in Engineering and Technology	
ETM 5153	Foundations of Engineering Management	
ETM 5163	Business Innovation and Technology	
ETM 5253	Engineering Problem Solving and Decision-Making	
ETM 5283	Strategic Planning	
ETM 5943	Lean Sigma Implementation	
IEM 5413	Engineering Entrepreneurship	
IEM 5603	Project Management	
IEM 5743	Information Systems and Technology	
IEM 5763	Supply Chain Strategy	
IEM 5813	Performance Measurement Systems	
MGMT 5113	Individual and Organizational Behavior	
MGMT 5533	Leadership Challenges	
MKTG 5133	Marketing Management	
SOC 5813	Myths and Realities of Organizational Change	
Hours Subtotal		24
Total Hours		32

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Engineering Technology: Fire Safety and Explosion Protection, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 30

Code	Title	Hours
Engineering Technology Core Courses		
FEMP 5013 or FSEP 5013	Research Design & Methodology	3
IEM 5603 or FSEP 5023	Project Management	3
FSEP 5133	Principles of Industrial and Process Safety	3
Fire Safety and Explosion Protection Core Courses		
FSEP 5033	Risk Analysis	3
FSEP 5113	Fire and Explosion Hazard Recognition	3
FSEP 5143	Structural Design for Fire and Life Safety	3
Hours Subtotal		18
Electives		
Select 6 hours, minimum of 3 hours from FSEP courses:		6
FSEP 5060	Emerging Topics in Engineering Technology	
FSEP 5123	Advanced Special Hazard Suppression and Detection	
FSEP 5153	Advanced Exposure Assessment	
FSEP 5163	Building Electrical Systems	
FSEP 5213	Advanced Building Design and Analysis	
FSEP 5383	Fire and Evacuation Modeling	
FSEP 5990	Directed Studies	
ETM 5153	Foundations of Engineering Management	
ETM 5221	Engineering Teaming	
ETM 5291	Failure Mode and Effects Analysis in Design	
ETM 5341	Leadership Strategies for Technical Professionals	
ETM 5371	Ethics for Practicing Engineers	
ETM 5411	Engineering Economic Analysis	
IEM 5143	Reliability and Maintainability	
IEM 5990	Special Topics in Industrial Engineering and Management	
ENGR 5133	Advanced Environmental Law for Technical Professionals	
FEMP 5113	Introduction to Fire Administration	
FEMP 5123	Introduction to Emergency Management	
FRNS 5123	Fire Dynamics in Forensic Investigations	
FRNS 5143	Methods in Fire and Explosion Investigation NFPA 921/1033	
FRNS 5183	Computer Fire Modeling	
Other FRNS Approved by Advisor		
Hours Subtotal		6

Master's Thesis

FSEP 5000	Master's Thesis	6
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Each M.S. candidate must prepare a written thesis and defend it before a thesis committee of at least three faculty members (minimum two from the FPST program). The written document must satisfy the requirements of the Graduate College for format and structure. The thesis defense consists of a twenty-minute oral presentation, followed by questions from the committee.

Hours Subtotal		6
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Total Hours		30
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Non-Thesis Option

Total Hours: 32

Code	Title	Hours
Engineering Technology Core Courses		
FEMP 5013 or FSEP 5013	Research Design & Methodology	3
IEM 5603 or FSEP 5023	Project Management	3
FSEP 5133	Principles of Industrial and Process Safety	3
Fire Safety and Explosion Protection Core Courses		
FSEP 5033	Risk Analysis	3
FSEP 5113	Fire and Explosion Hazard Recognition	3
FSEP 5143	Structural Design for Fire and Life Safety	3
Hours Subtotal		18
Electives		
Select 12 hours, minimum of 3 hours from FSEP courses:		12
FSEP 5060	Emerging Topics in Engineering Technology	
FSEP 5123	Advanced Special Hazard Suppression and Detection	
FSEP 5153	Advanced Exposure Assessment	
FSEP 5163	Building Electrical Systems	
FSEP 5213	Advanced Building Design and Analysis	
FSEP 5383	Fire and Evacuation Modeling	
FSEP 5990	Directed Studies	
ETM 5153	Foundations of Engineering Management	
ETM 5221	Engineering Teaming	
ETM 5291	Failure Mode and Effects Analysis in Design	
ETM 5341	Leadership Strategies for Technical Professionals	
ETM 5371	Ethics for Practicing Engineers	
ETM 5411	Engineering Economic Analysis	
IEM 5143	Reliability and Maintainability	
IEM 5990	Special Topics in Industrial Engineering and Management	
ENGR 5133	Advanced Environmental Law for Technical Professionals	
FEMP 5113	Introduction to Fire Administration	
FEMP 5123	Introduction to Emergency Management	
FRNS 5123	Fire Dynamics in Forensic Investigations	
FRNS 5143	Methods in Fire and Explosion Investigation NFPA 921/1033	

FRNS 5183	Computer Fire Modeling	
Other FRNS approved by advisor		
Hours Subtotal		12
Creative Component/Report		
FSEP 5990	Directed Studies	2
The FSEP 5990 course is used for a creative component. A report (a "mini-thesis") must be submitted, prepared in the style of an M.S. thesis, but not submitted for Graduate College approval.		
Hours Subtotal		2
Total Hours		32

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Engineering Technology: Mechatronics & Robotics, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 30

Code	Title	Hours
Core Courses		
MERO 5013	Research Design & Methodology	3
MERO 5023	Project Management	3
MERO 5033	Principles of Industrial and Process Safety	3
Hours Subtotal		9
Required Courses		
MERO 5113	Mechatronic Systems I	3
MERO 5123	Mechatronic Systems II	3
MERO 5213	Introduction to Robot Dynamics and Kinematics	3
Hours Subtotal		9
Electives		
Select 6 hours:		6
MERO 5060	Emerging Topics in Engineering Technology	
MERO 5070	Directed Studies	
MERO 5133	Mechatronic System Hardware and Software Integration	
MERO 5313	Linear Control Systems for Mechatronics	
MERO 5323	Intelligent Control of Mechatronic Systems	
MERO 5413	Robotic Underwater Vehicles	
MERO 5423	Engineering Acoustics	
MERO 5433	Industrial Noise Control	
MERO 5513	Electrohydraulics	
MERO 5523	Electropneumatics	
MERO 5613	Smart Manufacturing for Mechatronics	
MERO 5633	Multiphysics Computational Modeling and Simulation	
MERO 5713	Advanced CAD for Electro-Mechanical Systems	
MERO 5723	Mechanism Design with CAD	
MERO 5733	Advanced Vibration for Electro-Mechanical Systems	
MAE 5433	Robotics, Kinematics, Dynamics and Control	
or ECEN 5433	Robotics Kinematics, Dynamics and Control	
MAE 5483	Advanced Mechatronics Design	
or ECEN 5483	Advanced Mechatronics Design	
ECEN 5233	Embedded Sensor Networks	
ECEN 5283	Computer Vision	
ECEN 5533	Modern Communication Theory	
ECEN 5553	Telecommunications Systems	

ETM 5111	Introduction to Strategy, Technology and Integration	
ETM 5143	Strategic Decision Analysis for Engineering and Technology Managers	
ETM 5153	Foundations of Engineering Management	
ETM 5221	Engineering Teaming	
ETM 5241	Strategic Project Management	
ETM 5291	Failure Mode and Effects Analysis in Design	
ETM 5371	Ethics for Practicing Engineers	
ETM 5411	Engineering Economic Analysis	
IEM 5143	Reliability and Maintainability	
ETM 5461	Intellectual Property Management	
Hours Subtotal		6
Thesis		
MERO 5000	Thesis Research	6
Hours Subtotal		6
Total Hours		30

Non-Thesis Option

Total Hours: 30

Code	Title	Hours
Core Courses		
MERO 5013	Research Design & Methodology	3
MERO 5023	Project Management	3
MERO 5033	Principles of Industrial and Process Safety	3
Hours Subtotal		9
Required Courses		
MERO 5113	Mechatronic Systems I	3
MERO 5123	Mechatronic Systems II	3
MERO 5213	Introduction to Robot Dynamics and Kinematics	3
Hours Subtotal		9
Electives		
Select 12 hours (minimum 6 hours of MERO courses and 3 hours from ETM/IEM courses): ¹		12
MERO 5060	Emerging Topics in Engineering Technology	
MERO 5133	Mechatronic System Hardware and Software Integration	
MERO 5313	Linear Control Systems for Mechatronics	
MERO 5323	Intelligent Control of Mechatronic Systems	
MERO 5413	Robotic Underwater Vehicles	
MERO 5423	Engineering Acoustics	
MERO 5433	Industrial Noise Control	
MERO 5513	Electrohydraulics	
MERO 5523	Electropneumatics	
MERO 5613	Smart Manufacturing for Mechatronics	
MERO 5633	Multiphysics Computational Modeling and Simulation	
MERO 5713	Advanced CAD for Electro-Mechanical Systems	
MERO 5723	Mechanism Design with CAD	

MERO 5733	Advanced Vibration for Electro-Mechanical Systems	
MAE 5433	Robotics, Kinematics, Dynamics and Control	
or ECEN 5433	Robotics Kinematics, Dynamics and Control	
MAE 5483	Advanced Mechatronics Design	
or ECEN 5483	Advanced Mechatronics Design	
ECEN 5233	Embedded Sensor Networks	
ECEN 5283	Computer Vision	
ECEN 5533	Modern Communication Theory	
ECEN 5553	Telecommunications Systems	
ETM 5111	Introduction to Strategy, Technology and Integration	
ETM 5143	Strategic Decision Analysis for Engineering and Technology Managers	
ETM 5153	Foundations of Engineering Management	
ETM 5221	Engineering Teaming	
ETM 5241	Strategic Project Management	
ETM 5291	Failure Mode and Effects Analysis in Design	
ETM 5371	Ethics for Practicing Engineers	
ETM 5411	Engineering Economic Analysis	
IEM 5143	Reliability and Maintainability	
ETM 5461	Intellectual Property Management	
MERO 5070	Directed Studies ¹	
Hours Subtotal		12
Total Hours		30

¹ The MERO 5070 course is used for a creative component. A report (a "mini-thesis") must be submitted, prepared in the style of an M.S. thesis, but not submitted for Graduate College approval.

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

English, MA

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 30

Code	Title	Hours
Required Courses		
ENGL 5013	Introduction to Graduate Studies	3
ENGL 5363	Critical Approaches to Screen Studies: Theory and History	3
Select 18 additional hours of ENGL courses		18
Hours Subtotal		24
Thesis		
ENGL 5000	Master's Thesis	6
Hours Subtotal		6
Total Hours		30

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

English: Creative Writing, MFA

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 42

Code	Title	Hours
Required Courses		
<i>Craft and Forms</i>		
Select 3 hours from the following:		3
ENGL 5760	Craft and Forms of Prose	
ENGL 5780	Craft and Forms of Poetry	
ENGL 5720	Seminar in Creative Nonfiction	
<i>Graduate-Level Workshops</i>		
Select 12 hours from the following courses:		12
ENGL 5730	Seminar in Fiction Writing	
ENGL 5740	Seminar in Poetry Writing	
ENGL 6130	Studies in Fiction Writing	
ENGL 6140	Studies in Poetry Writing	
ENGL 6160	Studies in Creative Nonfiction	
<i>Graduate-Level Literature</i>		
Select six hours		6
Hours Subtotal		21
Electives		
Select nine hours from creative writing, literature, methods course for teaching assistants, or other areas of language and culture		9
Hours Subtotal		9
Thesis		
ENGL 5000 (Offered for variable credit, 1-9 credit hours, maximum of 12 credit hours.)		12
Hours Subtotal		12
Total Hours		42

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Other Degree Requirements

- **Creative Writing Requirements:** As the defining focus of work toward the MFA degree, creative writing coursework makes up the majority of credit hours, in a combination of ENGL 5730: Seminar in Fiction Writing, ENGL 5740: Seminar in Poetry Writing, ENGL 6130: Studies in Fiction Writing, ENGL 6140: Studies in Poetry Writing, ENGL 6160: Studies in Creative Nonfiction, ENGL 5723: Craft and Forms of Poetry Writing or ENGL 5763: Craft and Forms of Fiction Writing, as well as thesis hours.
- **Literature Coursework Requirement:** MFA students are required to take six hours of literature course work at the 5000- or 6000-level.
- **Electives:** Students choose the remaining hours of coursework in consultation with their advisory committees. Course selection should take into account the student's thesis genre, artistic interests, and academic and professional goals. For instance, students interested in going on to PhD work at Oklahoma State University upon completion of the MFA would normally include courses to assist in preparing them for the first-year exam for PhD students.
- **Required Hours at 5000/6000 Level:** All MFA students must complete their coursework at the 5000/6000 level.

English: Professional Writing, MA

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 30

Code	Title	Hours
Required Courses		
<i>Professional Writing Core Courses</i>		
ENGL 5593	Seminar in Style and Editing	3
ENGL 5553	Studies in Visual Rhetoric and Design	3
ENGL 5523	Genres in Professional Writing	3
ENGL 5340	Studies in Discourse Analysis	3
Select 6 hours from the following:		6
ENGL 5353	Studies in the History of Rhetoric	
ENGL 5560	Seminar in Professional Writing	
ENGL 6350	Topics in Rhetorical Theory	
ENGL 6500	Topics in Professional Writing	
Hours Subtotal		18
Thesis		
ENGL 5000	Master's Thesis	6
Hours Subtotal		6
Sample Electives¹		
Select 6 hours from the following:		6
<i>Professional Writing</i>		
ENGL 5013	Introduction to Graduate Studies	
ENGL 5223	Professional Writing Theory and Pedagogy	
ENGL 5560	Seminar in Professional Writing	
ENGL 6500	Topics in Professional Writing	
<i>Composition</i>		
ENGL 5213	Composition Theory and Pedagogy	
<i>Linguistics</i>		
ENGL 5143	Descriptive Linguistics	
ENGL 5123	Approaches to Language Acquisition	
ENGL 5130	Studies in English Grammar	
ENGL 5140	Seminar in Linguistics	
ENGL 6410	Topics in Linguistics	
<i>TESL</i>		
ENGL 5243	Teaching English as a Second Language	
ENGL 5333	Second Language Assessment	
ENGL 5313	Internship, Teaching English as a Second Language	
ENGL 5120	Studies in Teaching English as a Second Language	
ENGL 6420	Topics in Second Language Acquisition	
Hours Subtotal		6
Total Hours		30

¹ Courses other than those listed may be taken as electives if approved by the advisory committee.

Non-Thesis Option

Total Hours: 34

Code	Title	Hours
Required Courses		
<i>Professional Writing Core Courses</i>		
ENGL 5593	Seminar in Style and Editing	3
ENGL 5553	Studies in Visual Rhetoric and Design	3
ENGL 5523	Genres in Professional Writing	3
ENGL 5340	Studies in Discourse Analysis	3
Select 6 hours from the following:		6
ENGL 5353	Studies in the History of Rhetoric	
ENGL 5560	Seminar in Professional Writing	
ENGL 6350	Topics in Rhetorical Theory	
ENGL 6500	Topics in Professional Writing	
Hours Subtotal		18
Creative Component		
ENGL 5210	Sem or Directed Study	1
ENGL 5520	Internship in Professional Writing	3
Hours Subtotal		4
Sample Electives¹		
Select 12 hours from the following:		12
<i>Professional Writing</i>		
ENGL 5013	Introduction to Graduate Studies	
ENGL 5223	Professional Writing Theory and Pedagogy	
ENGL 5560	Seminar in Professional Writing	
ENGL 6500	Topics in Professional Writing	
<i>Composition</i>		
ENGL 5213	Composition Theory and Pedagogy	
<i>Linguistics</i>		
ENGL 5143	Descriptive Linguistics	
ENGL 5123	Approaches to Language Acquisition	
ENGL 5130	Studies in English Grammar	
ENGL 5140	Seminar in Linguistics	
ENGL 6410	Topics in Linguistics	
<i>TESL</i>		
ENGL 5243	Teaching English as a Second Language	
ENGL 5333	Second Language Assessment	
ENGL 5313	Internship, Teaching English as a Second Language	
ENGL 5120	Studies in Teaching English as a Second Language	
ENGL 6420	Topics in Second Language Acquisition	
Hours Subtotal		12
Total Hours		34

¹ Courses other than those listed may be taken as electives if approved by the advisory committee.

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic

regulations for minimal GPA, language proficiency and other general requirements.

English: Teaching English to Speakers of Other Languages, MA

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 30

Code	Title	Hours
Required Courses		
<i>TESL Core Courses</i>		
ENGL 5243	Teaching English as a Second Language	3
ENGL 5313	Internship, Teaching English as a Second Language	3
ENGL 5333	Second Language Assessment	3
<i>Linguistics Core Courses</i>		
ENGL 5123	Approaches to Language Acquisition	3
ENGL 5130	Studies in English Grammar	3
ENGL 5143	Descriptive Linguistics	3
Hours Subtotal		18
Thesis		
ENGL 5000	Master's Thesis	6
Hours Subtotal		6
Sample Electives¹		
Select 6 hours from the following:		6
<i>Language and Linguistics</i>		
ENGL 4003	History of the English Language	
ENGL 4093	Language in America (DS)	
ENGL 5133	Phonetics and Phonology	
ENGL 5140	Seminar in Linguistics	
ENGL 5153	Syntax	
ENGL 5173	Sociolinguistics	
ENGL 5410	Seminar in British Literature of the 16th Century	
PSYC 6393	Language Development	
<i>Teaching Methodology</i>		
ENGL 5013	Introduction to Graduate Studies	
ENGL 5120	Studies in Teaching English as a Second Language	
ENGL 5213	Composition Theory and Pedagogy	
ENGL 5223	Professional Writing Theory and Pedagogy	
ENGL 6420	Topics in Second Language Acquisition	
EDTC 5103	Advanced Computing Applications in Education	
CIED 5143	Language Arts in the Curriculum	
<i>Cultural Studies</i>		
Hours Subtotal		6
Total Hours		30

¹ Courses other than those listed may be taken as electives if approved by the advisory committee.

Non-Thesis Option

Total Hours: 34

Code	Title	Hours
Required Courses		
<i>TESL Core Courses</i>		
ENGL 5243	Teaching English as a Second Language	3
ENGL 5313	Internship, Teaching English as a Second Language	3
ENGL 5333	Second Language Assessment	3
<i>Linguistics Core Courses</i>		
ENGL 5123	Approaches to Language Acquisition	3
ENGL 5130	Studies in English Grammar	3
ENGL 5143	Descriptive Linguistics	3
Hours Subtotal		18
Creative Component		
ENGL 5210	Sem or Directed Study	1
Hours Subtotal		1
Sample Electives¹		
Select 15 hours of the following:		15
<i>Language and Linguistics</i>		
ENGL 4003	History of the English Language	
ENGL 4093	Language in America (DS)	
ENGL 5133	Phonetics and Phonology	
ENGL 5140	Seminar in Linguistics	
ENGL 5153	Syntax	
ENGL 5173	Sociolinguistics	
ENGL 5410	Seminar in British Literature of the 16th Century	
PSYC 6393	Language Development	
<i>Teaching Methodology</i>		
ENGL 5013	Introduction to Graduate Studies	
ENGL 5120	Studies in Teaching English as a Second Language	
ENGL 5213	Composition Theory and Pedagogy	
ENGL 5223	Professional Writing Theory and Pedagogy	
ENGL 6420	Topics in Second Language Acquisition	
EDTC 5103	Advanced Computing Applications in Education	
CIED 5143	Language Arts in the Curriculum	
<i>Cultural Studies</i>		
Hours Subtotal		15
Total Hours		34

¹ Courses other than those listed may be taken as electives if approved by the advisory committee.

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Entomology and Plant Pathology: Entomology, MS

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 30

Code	Title	Hours
Core Requirements		
ENTO 5870	Scientific Presentations (Both fall and spring semesters - 1 credit hour each)	2
or PLP 5870	Scientific Presentations	
ENTO 5623	Advanced Biotechnology Methods	3
or PLP 5623	Advanced Biotechnology Methods	
ENTO 5524	Integrated Management of Insect Pests and Pathogens	4
or PLP 5524	Integrated Management of Insect Pests and Pathogens	
ENTO 5000	Master's Research and Thesis	6
or PLP 5000	Research	
Exactly 6 graduate credit hours total must be listed on the Plan of Study (more than 6 credit hours completed will appear on final transcripts, not on the Plan of Study).		
Hours Subtotal		15
Discipline Requirements		
Entomology - 15 hours		15
Core - select at least two courses from the following:		
ENTO 5464	Insect Biology and Classification	
ENTO 5003	Insect Biochemistry	
ENTO 5044	Insect Morphology and Physiology	
Plus any additional courses to complete the graduate program and Plan of Study (7-8 hours)		
Hours Subtotal		15
Total Hours		30

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Entomology and Plant Pathology: Plant Pathology, MS

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 30

Code	Title	Hours
Core Requirements		
ENTO 5870	Scientific Presentations (Both fall and spring semesters - 1 credit hour each)	2
or PLP 5870	Scientific Presentations	
ENTO 5623	Advanced Biotechnology Methods	3
or PLP 5623	Advanced Biotechnology Methods	
ENTO 5524	Integrated Management of Insect Pests and Pathogens	4
or PLP 5524	Integrated Management of Insect Pests and Pathogens	
ENTO 5000	Master's Research and Thesis	6
or PLP 5000	Research	
Exactly 6 graduate credit hours total must be listed on the Plan of Study (more than 6 credit hours completed will appear on final transcripts, not on the Plan of Study).		
Hours Subtotal		15
Discipline Requirements		
Plant Pathology - 15 credit hours		15
PLP 5343	Principles of Plant Pathology (Required if student has NOT completed an Introductory PLP course.)	
Core - select at least 2 courses from the following:		
PLP 5003	Plant Nematology	
PLP 5014	Plant Virology	
PLP 5104	Mycology	
PLP 5304	Phytobacteriology	
Plus additional courses to complete the graduate program Plan of Study (6-10 hours)		
Hours Subtotal		15
Total Hours		30

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Entrepreneurship, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 33

Code	Title	Hours
Degree Core		
<i>Required Courses</i>		
ACCT 5183	MBA Financial Reporting	3
ACCT 5283	MBA Managerial Accounting	3
EEE 5113	Entrepreneurship and Venture Management	3
EEE 5223	Entrepreneurial Marketing	3
EEE 5233	Ideation, Creativity & Innovation	3
EEE 5333	Launching a Business: The First 100 Days	3
EEE 5993	Preparing Effective Business Plans	3
FIN 5013	Business Finance	3
MGMT 5113	Individual and Organizational Behavior	3
Hours Subtotal		27
Electives		
Select six hours from the following: ^{1,2}		6
EEE 5133	Dilemmas and Debates in Entrepreneurship	
EEE 5200	Special Topics in Entrepreneurship	
EEE 5263	Corporate Entrepreneurship	
EEE 5313	Emerging Enterprise Consulting	
EEE 5403	Social Entrepreneurship	
EEE 5513	Growing Small and Family Ventures	
EEE 5610	Advanced Entrepreneurship Practicum	
EEE 5653	Venture Capital	
Hours Subtotal		6
Total Hours		33

¹ Appropriate substitutes, such as other upper-division Spears School of Business courses or upper-division courses from other colleges, can be made on a case-by-case basis.

² Involvement in an eligible study abroad program or the Riata Internship may fulfill a portion of the elective requirements.

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Environmental Science, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 30

Code	Title	Hours
Core Requirements		
ENVR 5303	Issues in Environmental Sustainability	3
ENVR 5123	Environmental Problem Analysis	3
	Select an approved 3-hour Natural or Physical Science course.	3
	Select an approved 3-hour skills course.	3
	Select 12 approved hours to complete degree requirements.	12
Hours Subtotal		24
Research Requirement		
	Select 6 hours of Thesis	6
Hours Subtotal		
Total Hours		30

Non-Thesis Option

Total Hours: 32

Code	Title	Hours
Core Requirements		
ENVR 5303	Issues in Environmental Sustainability	3
ENVR 5123	Environmental Problem Analysis	3
	Select an approved 3-hour Natural or Physical Science course.	3
	Select an approved 3-hour skills course.	3
	Select 18 approved hours to complete degree requirements.	18
Hours Subtotal		30
Research Requirement		
	Select 2 credit hours of Thesis	2
Hours Subtotal		
Total Hours		32

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Environmental Science: Environmental Management Professional Science Masters, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 33

Code	Title	Hours
Required Core Curriculum		
ENVR 5123	Environmental Problem Analysis	3
ENVR 5533	Genres of Environmental Writing	3
ENVR 5303	Issues in Environmental Sustainability	3
ENVR 5503	Environmental Management Practicum	3
ENVR 5510	Environmental Management Internship	3
Hours Subtotal		15
Electives		
Select 18 hours of natural or physical science.		18
Examples of Elective Courses:		
ENVR 5313	Clean Air Act: Regulation, Compliance and Reporting	
ENVR 5443	Hazardous Waste Regulations for Environmental Managers	
ENVR 5453	Bioremediation for Environmental Managers	
ENVR 5523	Industrial Ecology	
ENVR 5543	Environmental Management Systems	
ENVR 5573	Applied Standards for Environmental Managers	
ENVR 5633	Physical Geology for Environmental Managers	
ENVR 5703	Chemical Aspects of Environmental Science I	
ENVR 5713	Chemical Aspects of Environmental Science II	
ENVR 5733	Environmental Site Assessment	
ENVR 5743	Environmental Impact Assessment	
ENVR 5753	Environmental Site Remediation	
ENVR 5823	Watershed Management	
ENVR 5853	Field Stream Assessment	
Hours Subtotal		18
Total Hours		33

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Family and Community Services, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 36

Code	Title	Hours
Core Courses		
HDFS 5173	Program Design, Implementation, and Evaluation in Human Development and Family Science	3
HDFS 5213	Lifespan Development	3
HDFS 5223	Resilience in Individuals and Families	3
HDFS 5443	Interpersonal Relationships	3
HDFS 5543	Family Crisis and Trauma	3
HDFS 5553	Perspectives on Parenting and Parent Education	3
HDFS 5713	Individual and Family Resource Management	3
HDFS 5753	Leadership and Management of Community Service Programs	3
HDFS 5913	Foundations and Principles of Family and Community Services	3
HDFS 5923	Dynamics of Family Interaction	3
Outside Electives		
	Select 3 hours with advisor approval (students work with their advisor to choose at least one elective appropriate to their career goals)	3
Creative Component		
HDFS 5163	Master's Capstone in HDFS	3
Total Hours		36

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Family and Consumer Sciences Education, MS

regulations for minimal GPA, language proficiency and other general requirements.

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 36

Code	Title	Hours
Degree Core		
<i>Required Courses</i>		
HDFS 5823	History and Philosophy of Family and Consumer Sciences Education	3
HDFS 5833	Occupational Programs in Family and Consumer Sciences	3
HDFS 5843	Reading in the Content Areas of Family and Consumer Sciences Education	3
HDFS 5873	Technology in Family and Consumer Sciences Programs	3
HDFS 5953	Research Experience in Family and Consumer Sciences	3
HDFS 5963	Evaluation and Assessment in Family and Consumer Sciences Programs	3
HDFS 5993	Special Topics in Family and Consumer Sciences Education: 4-H and FCCLA	3
<i>Choose One Specialization Course (3 Credit Hours)</i>		3
HDFS 5973	Administration of Family and Consumer Sciences Education Programs	
HDFS 5983	Techniques of Supervision in Family and Consumer Sciences Programs	
<i>Choose Three Electives (9 Credit Hours)</i>		9
HDFS 4913	Instructional Methods in Family and Consumer Sciences	
HDFS 5110	Directed Study in HDFS (3 Hours Allowed)	
HDFS 5853	Adolescent Learners in Family and Consumer Sciences Programs	
HDFS 5863	Exceptional Learners in Family and Consumer Sciences Programs	
HDFS 5883	Family and Consumer Sciences in a Pluralistic Society: Foundations and Issues	
HDFS 5893	Addressing Family Issues and Public Policy Through Family and Consumer Sciences Education	
HDFS 5943	Development of Instructional Materials for Family and Consumer Sciences Programs	
<i>Non-Thesis Project Requirement (3 Credit Hours)</i>		
HDFS 5160	Master's Creative Component	3
Total Hours		36

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic

Family Financial Planning, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 36

Code	Title	Hours
Degree Core		
<i>Required Courses</i>		
EDHS 5240	Master's Creative Component	3
FFP 5303	Fundamentals of Family Financial Planning	3
FFP 5333	Theories and Research in Family Financial Planning I	3
FFP 5353	Financial Counseling for Family Financial Planning	3
FFP 5403	Estate Planning for Families	3
FFP 5453	Retirement Planning, Employee Benefits and the Family	3
FFP 5553	Insurance Planning for Families	3
FFP 5603	Investing for the Family's Future	3
FFP 5653	Personal Income Tax for Family Financial Planning	3
FFP 5803	Case Studies in Family Financial Planning	3
Hours Subtotal		30
Electives		
Select six hours from the following:		6
FFP 5343	Theories and Research in Family Financial Planning II	
FFP 5483	Military Family Financial Issues	
FFP 5703	Professional Practices in Family Financial Planning	
REMS 5953	Statistical Methods in Education	
Hours Subtotal		6
Total Hours		36

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Fire and Emergency Management Administration, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 33

Code	Title	Hours
Core Courses		
FEMP 5113	Introduction to Fire Administration	3
FEMP 5123	Introduction to Emergency Management	3
FEMP 5013	Research Design & Methodology	3
Hours Subtotal		9
Methods/Research		
FEMP 5653	Hazard, Vulnerability, and Risk Analysis	3
or FEMP 5023	Quantitative Methods for Fire and Emergency Management I	
or FEMP 6013	Qualitative Methods for Fire and Emergency Management	
Hours Subtotal		3
Administration		
FEMP 5413	Financial Administration for Fire and Emergency Management	3
or FEMP 5423	Labor Management for Fire and Emergency Management	
Hours Subtotal		3
Options		
Select 6 hours from one of the following options:		6
<i>Emergency Management Option</i>		
FEMP 5213	Disaster Response	
FEMP 5223	Preparedness and Planning	
FEMP 5233	Disaster Recovery	
FEMP 5243	Mitigation	
FEMP 5820	Special Topics Seminar in Emergency Management	
FEMP 6820	Advanced Special Topics Seminar in Emergency Management	
<i>Fire Administration Option</i>		
FEMP 5313	Political and Community Relations for Fire and Emergency Management Administration	
FEMP 5323	Leadership and Management for Fire and Emergency Management	
FEMP 5333	Incident Command System	
FEMP 6413	Seminar Risk Theory and Management	
FEMP 5830	Special Topics Seminar in Fire Administration	
FEMP 6810	Advanced Special Topics Seminar in Fire Administration	
Hours Subtotal		6
Electives		

Select 3 or more of these courses or any of the courses listed in this curriculum not already taken.		6
FEMP 5613	Complex Emergencies	
FEMP 5623	Emergency Management in the International Setting	
FEMP 5633	Emergency Management and Public Policy in the United States	
FEMP 5643	Politics of Disaster	
FEMP 5810	Special Topics Seminar in Fire and Emergency Management	
FEMP 6023	Quantitative Methods for Fire and Emergency Management II	
FEMP 6103	Proseminar in Fire and Emergency Management	
FEMP 6303	Populations at Risk	
FEMP 6313	Comparative and International Dimensions of Emergency Management	
FEMP 6323	Organizational Behavior in Disasters	
FEMP 6840	Directed Readings in Fire and Emergency Management	
POLS 5673	Understanding and Responding to Terrorism	
Hours Subtotal		6
Thesis		
FEMP 5000	Thesis	6
Hours Subtotal		6
Total Hours		33

Non-Thesis Option

Total Hours: 33

Code	Title	Hours
Core Courses		
FEMP 5113	Introduction to Fire Administration	3
FEMP 5123	Introduction to Emergency Management	3
FEMP 5013	Research Design & Methodology	3
Hours Subtotal		9
Methods/Research		
FEMP 5653	Hazard, Vulnerability, and Risk Analysis	3
or FEMP 5023	Quantitative Methods for Fire and Emergency Management I	
or FEMP 6013	Qualitative Methods for Fire and Emergency Management	
Hours Subtotal		3
Administration		
FEMP 5413	Financial Administration for Fire and Emergency Management	3
or FEMP 5423	Labor Management for Fire and Emergency Management	
Hours Subtotal		3
Options		
Select 6 hours from one of the following options:		6
<i>Emergency Management Option</i>		
FEMP 5213	Disaster Response	

FEMP 5223	Preparedness and Planning
FEMP 5233	Disaster Recovery
FEMP 5243	Mitigation
FEMP 5820	Special Topics Seminar in Emergency Management
FEMP 6820	Advanced Special Topics Seminar in Emergency Management

regulations for minimal GPA, language proficiency and other general requirements.

Fire Administration Option

FEMP 5313	Political and Community Relations for Fire and Emergency Management Administration
FEMP 5323	Leadership and Management for Fire and Emergency Management
FEMP 5333	Incident Command System
FEMP 6413	Seminar Risk Theory and Management
FEMP 5830	Special Topics Seminar in Fire Administration
FEMP 6810	Advanced Special Topics Seminar in Fire Administration

Hours Subtotal	6
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Electives

Select 3 or more of these courses or any of the courses listed in this curriculum not already taken.	9
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FEMP 5613	Complex Emergencies
FEMP 5623	Emergency Management in the International Setting
FEMP 5633	Emergency Management and Public Policy in the United States
FEMP 5643	Politics of Disaster
FEMP 5810	Special Topics Seminar in Fire and Emergency Management
FEMP 6023	Quantitative Methods for Fire and Emergency Management II
FEMP 6103	Proseminar in Fire and Emergency Management
FEMP 6303	Populations at Risk
FEMP 6313	Comparative and International Dimensions of Emergency Management
FEMP 6323	Organizational Behavior in Disasters
FEMP 6840	Directed Readings in Fire and Emergency Management
POLS 5673	Understanding and Responding to Terrorism

Hours Subtotal	9
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Practicum

FEMP 5903	Practicum in Fire and Emergency Management Administration	3
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Hours Subtotal	3
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Total Hours	33
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Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic

Food Science, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 30

Code	Title	Hours
Degree Core		
FDSC 4153	Advanced Food Microbiology	3
FDSC 4763	Analysis of Food Products	3
FDSC 5000	Master's Research and Thesis	6
FDSC 5300	Food Science Seminar	1
FDSC 5373	Advanced Food Chemistry	3
STAT 5013	Statistics for Experimenters I	3
Hours Subtotal		19
Electives		
Select 11 hours from the following:		11
FDSC 4123	Principles of Food Engineering	
FDSC 4243	Researching Consumer Food Preferences	
FDSC 4253	Pre-Harvest Food Safety	
FDSC 4333	Processed Meat	
FDSC 5102	Ethics and Professionalism in Animal and Food Science	
FDSC 5113	Internal Audit and Advanced HACCP	
FDSC 5120	Special Topics in Food Science	
FDSC 5143	Food Safety Modernization Act	
FDSC 5213	Advances in Meat Science	
FDSC 5233	Food Safety Audit Schemes	
FDSC 5333	Carcass Value Estimation Systems	
FDSC 5393	Issues in Food Science	
FDSC 5553	Interpreting Animal and Food Science Research	
Hours Subtotal		11
Total Hours		30

Formal Report Option

Total Hours: 32

Code	Title	Hours
Degree Core		
FDSC 4153	Advanced Food Microbiology	3
FDSC 4763	Analysis of Food Products	3
FDSC 5000	Master's Research and Thesis	2
FDSC 5300	Food Science Seminar (offered for fixed credit, 1 credit hour, maximum of 3 credit hours)	3
FDSC 5373	Advanced Food Chemistry	3
STAT 5013	Statistics for Experimenters I	3
Hours Subtotal		17
Electives		
Select 15 hours from the following:		15
FDSC 4123	Principles of Food Engineering	

FDSC 4243	Researching Consumer Food Preferences	
FDSC 4253	Pre-Harvest Food Safety	
FDSC 4333	Processed Meat	
FDSC 5102	Ethics and Professionalism in Animal and Food Science	
FDSC 5113	Internal Audit and Advanced HACCP	
FDSC 5120	Special Topics in Food Science	
FDSC 5143	Food Safety Modernization Act	
FDSC 5213	Advances in Meat Science	
FDSC 5233	Food Safety Audit Schemes	
FDSC 5333	Carcass Value Estimation Systems	
FDSC 5393	Issues in Food Science	
FDSC 5553	Interpreting Animal and Food Science Research	
Hours Subtotal		15
Total Hours		32

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Forensic Sciences, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis

Total Hours: 30

Code	Title	Hours
Required Courses		
FRNS 5000	Thesis Research & Seminar	6
FRNS 5013	Survey of Forensic Sciences	3
FRNS 5063	Ethical Research and Scientific Writing	3
FRNS 5653	The Law and Expert Evidence	3
FRNS 5963	Forensic Statistics	3
Hours Subtotal		18
Electives		
Select 12 hours from the following:		12
FRNS 5023	Questioned Document Examination	
FRNS 5033	Theory and Practice of Forensic Handwriting Examination	
FRNS 5043	Technical Aspects of Forensic Document Examination	
FRNS 5053	The Historical Aspects of Forensic Document Examination	
FRNS 5073	Quality Assurance in Forensic Science	
FRNS 5083	Ethics in Forensic Leadership	
FRNS 5090	Internship in Forensic Sciences	
FRNS 5213	Molecular Biology for the Forensic Scientist	
FRNS 5242	Population Genetics for the Forensic Scientist	
FRNS 5282	Methods in Forensic Sciences	
FRNS 5323	Forensic Microbiology	
FRNS 5413	Forensic Pathology and Medicine	
FRNS 5422	Forensic Osteology and Anthropology	
FRNS 5513	Forensic Bioscience	
FRNS 5523	Forensic Toxicology	
FRNS 5533	Drug Toxicity	
FRNS 5543	Advanced Forensic Toxicology	
FRNS 5622	Crime Scene Laboratory and Moot Court Experience	
FRNS 5713	Forensic Psychology	
FRNS 5723	Advanced Forensic Psychology	
FRNS 5733	Forensic Victimology	
FRNS 5743	Forensic Science Seminar	
FRNS 5753	Criminal Profiling	
FRNS 5943	Forensic Management and Organizational Development	
FRNS 5960	Forensic Problem Solving through Applied Research	
FRNS 5970	Directed Readings in Forensic Sciences	
FRNS 5980	Non-Thesis Creative Component in Forensic Sciences	

FRNS 5990	Special Topics in Forensic Sciences	
Hours Subtotal		12
Total Hours		30

Non-Thesis

Total Hours: 32

Code	Title	Hours
Required Courses		
FRNS 5063	Ethical Research and Scientific Writing	3
FRNS 5613	Criminalistics and Evidence Analysis	3
FRNS 5653	The Law and Expert Evidence	3
Hours Subtotal		9
Electives		
Select 23 hours from the following:		23
FRNS 5013	Survey of Forensic Sciences	
FRNS 5023	Questioned Document Examination	
FRNS 5033	Theory and Practice of Forensic Handwriting Examination	
FRNS 5043	Technical Aspects of Forensic Document Examination	
FRNS 5053	The Historical Aspects of Forensic Document Examination	
FRNS 5073	Quality Assurance in Forensic Science	
FRNS 5083	Ethics in Forensic Leadership	
FRNS 5090	Internship in Forensic Sciences	
FRNS 5213	Molecular Biology for the Forensic Scientist	
FRNS 5242	Population Genetics for the Forensic Scientist	
FRNS 5282	Methods in Forensic Sciences	
FRNS 5323	Forensic Microbiology	
FRNS 5413	Forensic Pathology and Medicine	
FRNS 5422	Forensic Osteology and Anthropology	
FRNS 5513	Forensic Bioscience	
FRNS 5523	Forensic Toxicology	
FRNS 5533	Drug Toxicity	
FRNS 5543	Advanced Forensic Toxicology	
FRNS 5622	Crime Scene Laboratory and Moot Court Experience	
FRNS 5713	Forensic Psychology	
FRNS 5723	Advanced Forensic Psychology	
FRNS 5733	Forensic Victimology	
FRNS 5743	Forensic Science Seminar	
FRNS 5753	Criminal Profiling	
FRNS 5943	Forensic Management and Organizational Development	
FRNS 5960	Forensic Problem Solving through Applied Research	
FRNS 5970	Directed Readings in Forensic Sciences	
FRNS 5980	Non-Thesis Creative Component in Forensic Sciences	
FRNS 5990	Special Topics in Forensic Sciences	

Hours Subtotal	23
Total Hours	32

Other Forensic Sciences Requirements

- 16 Hours of Professional Seminar
- Comprehensive Exam
- Moot Court Expert Testimony Experience

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Forensic Sciences: Arson, Explosives, Firearms and Toolmarks Investigation, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 39

Code	Title	Hours
Required Courses		
FRNS 5063	Ethical Research and Scientific Writing	3
FRNS 5613	Criminalistics and Evidence Analysis	3
FRNS 5653	The Law and Expert Evidence	3
FRNS 5963	Forensic Statistics	3
FRNS 5980	Non-Thesis Creative Component in Forensic Sciences	3
Hours Subtotal		15
Electives		
Select 24 hours of the following:		24
FRNS 5013	Survey of Forensic Sciences	
FRNS 5073	Quality Assurance in Forensic Science	
FRNS 5093	Scientific Writing and Presentation Skills	
FRNS 5103	The Chemistry of Pyrotechnics	
FRNS 5113	Essential Science for Explosive Operators	
FRNS 5123	Fire Dynamics in Forensic Investigations	
FRNS 5133	Ordnance Identification and Recognition	
FRNS 5143	Methods in Fire and Explosion Investigation NFPA 921/1033	
FRNS 5153	Explosives Research, Testing and Evaluation Methods	
FRNS 6123	Advanced Fire Dynamics	
FRNS 6173	Advanced Interdisciplinary Post Blast Investigation	
FRNS 5183	Computer Fire Modeling	
FRNS 6183	Advanced Computer Fire Modeling	
FRNS 5423	Blast Injuries and Effects	
FRNS 6423	Advanced Blast Injuries and Effects	
FRNS 5663	Destructive Devices/Explosives: Law and Regulations	
FRNS 5673	Intelligence for Forensic Investigators	
FRNS 5713	Forensic Psychology	
FRNS 5723	Advanced Forensic Psychology	
FRNS 5803	Circuit Exploitation of Destructive Devices	
FRNS 5813	Building Construction and Fire/Explosion Forensic Examination	
FRNS 5823	Forensic Examination of Fire Protection Systems	
FRNS 5833	Identification of Destructive Device Fuzing Systems	
FRNS 6843	Advanced Destructive Device Circuit Exploitation	

FRNS 5853	Electrical Theory and Failure Analysis in Forensic Fire Investigations
FRNS 6853	Advanced Electrical Theory and Failure Analysis in Forensic Fire Investigations
FRNS 5873	Firearms and Toolmarks
FRNS 5970	Directed Readings in Forensic Sciences
FRNS 5990	Special Topics in Forensic Sciences
Hours Subtotal	24
Total Hours	39

Other Forensic Sciences: Arson and Explosives Investigation Requirements

- Comprehensive Exam

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Forensic Sciences: Forensic Document Examination, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 39

Code	Title	Hours
Required Courses		
FRNS 5013	Survey of Forensic Sciences	3
FRNS 5023	Questioned Document Examination	3
FRNS 5033	Theory and Practice of Forensic Handwriting Examination	3
FRNS 5043	Technical Aspects of Forensic Document Examination	3
FRNS 5053	The Historical Aspects of Forensic Document Examination	3
FRNS 5063	Ethical Research and Scientific Writing	3
FRNS 5073	Quality Assurance in Forensic Science	3
FRNS 5613	Criminalistics and Evidence Analysis	3
FRNS 5653	The Law and Expert Evidence	3
FRNS 5980	Non-Thesis Creative Component in Forensic Sciences	3
Hours Subtotal		30

Electives

Select 9 hours from the following:		9
FRNS 5000	Thesis Research & Seminar	
FRNS 5083	Ethics in Forensic Leadership	
FRNS 5090	Internship in Forensic Sciences	
FRNS 5213	Molecular Biology for the Forensic Scientist	
FRNS 5242	Population Genetics for the Forensic Scientist	
FRNS 5282	Methods in Forensic Sciences	
FRNS 5323	Forensic Microbiology	
FRNS 5413	Forensic Pathology and Medicine	
FRNS 5422	Forensic Osteology and Anthropology	
FRNS 5513	Forensic Bioscience	
FRNS 5523	Forensic Toxicology	
FRNS 5533	Drug Toxicity	
FRNS 5543	Advanced Forensic Toxicology	
FRNS 5622	Crime Scene Laboratory and Moot Court Experience	
FRNS 5713	Forensic Psychology	
FRNS 5723	Advanced Forensic Psychology	
FRNS 5733	Forensic Victimology	
FRNS 5743	Forensic Science Seminar	
FRNS 5753	Criminal Profiling	
FRNS 5943	Forensic Management and Organizational Development	
FRNS 5960	Forensic Problem Solving through Applied Research	
FRNS 5963	Forensic Statistics	

FRNS 5970	Directed Readings in Forensic Sciences	
FRNS 5990	Special Topics in Forensic Sciences	
Hours Subtotal		9
Total Hours		39

Additional Forensic Sciences: Forensic Document Examination Requirements

- 16 hours of Professional Seminar
- Comprehensive Exam

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Forensic Sciences: Forensic Science Administration, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 39

Code	Title	Hours
Required Courses		
FRNS 5013	Survey of Forensic Sciences	3
FRNS 5063	Ethical Research and Scientific Writing	3
FRNS 5073	Quality Assurance in Forensic Science	3
FRNS 5083	Ethics in Forensic Leadership	3
FRNS 5213	Molecular Biology for the Forensic Scientist	3
FRNS 5413	Forensic Pathology and Medicine	3
FRNS 5613	Criminalistics and Evidence Analysis	3
FRNS 5653	The Law and Expert Evidence	3
FRNS 5943	Forensic Management and Organizational Development	3
FRNS 5980	Non-Thesis Creative Component in Forensic Sciences	3
HCA 5023	Human Resources in Health Care and Public Administration	3
Hours Subtotal		33
Electives		
Select 6 hours from the following:		6
FRNS 5000	Thesis Research & Seminar	
FRNS 5023	Questioned Document Examination	
FRNS 5033	Theory and Practice of Forensic Handwriting Examination	
FRNS 5043	Technical Aspects of Forensic Document Examination	
FRNS 5053	The Historical Aspects of Forensic Document Examination	
FRNS 5090	Internship in Forensic Sciences	
FRNS 5242	Population Genetics for the Forensic Scientist	
FRNS 5282	Methods in Forensic Sciences	
FRNS 5323	Forensic Microbiology	
FRNS 5422	Forensic Osteology and Anthropology	
FRNS 5513	Forensic Bioscience	
FRNS 5523	Forensic Toxicology	
FRNS 5533	Drug Toxicity	
FRNS 5543	Advanced Forensic Toxicology	
FRNS 5622	Crime Scene Laboratory and Moot Court Experience	
FRNS 5713	Forensic Psychology	
FRNS 5723	Advanced Forensic Psychology	
FRNS 5733	Forensic Victimology	
FRNS 5743	Forensic Science Seminar	
FRNS 5753	Criminal Profiling	

FRNS 5960	Forensic Problem Solving through Applied Research	
FRNS 5963	Forensic Statistics	
FRNS 5970	Directed Readings in Forensic Sciences	
FRNS 5990	Special Topics in Forensic Sciences	
Hours Subtotal		6
Total Hours		39

Additional Forensic Sciences: Forensic Science Administration Requirements

- 16 Hours of Professional Seminar
- Comprehensive Exam

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

General Agriculture: Agribusiness, MAG

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Formal Report Option

Total Hours: 32

Code	Title	Hours
Required Courses		
Select a minimum of 12 hours in Agricultural Economics not including AGECE 5000 or AGECE 5010: ¹		12
AGECE 5423	Agribusiness Management	
or AGECE 5043	Advanced Farm and Ranch Management	
AGECE 5603	Advanced Agricultural Finance	
MGMT 5113	Individual and Organizational Behavior	
STAT 5543	Applied Regression Analysis	
ECON 5113	Managerial Economics ²	
or AGECE 5103	Mathematical Economics	
Hours Subtotal		12
Electives		
Select 20 hours of electives.		20
Hours Subtotal		20
Total Hours		32

¹ Students with no background in accounting should take ACCT 5103. Students with strong skills in mathematics and statistics should take STAT 5543 in the fall instead of STAT 5013 and then take AGECE 5213 in the spring. The comprehensive final examination may be administered after the student has completed one year in the program.

² Students who have had calculus should take AGECE 5103 instead of ECON 5113. Students with no upper-division training in microeconomics should take ECON 3113 before taking ECON 5113.

Creative Component Option

Total Hours: 36

Code	Title	Hours
Required Courses		
Select a minimum of 12 hours in Agricultural Economics not including AGECE 5000 or AGECE 5010: ¹		12
AGECE 5423	Agribusiness Management	
or AGECE 5043	Advanced Farm and Ranch Management	
AGECE 5603	Advanced Agricultural Finance	
MGMT 5113	Individual and Organizational Behavior	
STAT 5543	Applied Regression Analysis	
ECON 5113	Managerial Economics ²	
or AGECE 5103	Mathematical Economics	
Hours Subtotal		12
Electives		
Select 24 hours of electives.		24

Hours Subtotal	24
Creative Component	
Select a creative component that might include AGECE 5990.	
Total Hours	36

- Students with no background in accounting should take ACCT 5103. Students with strong skills in mathematics and statistics should take STAT 5543 in the fall instead of STAT 5013 and then take AGECE 5213 in the spring. The comprehensive final examination may be administered after the student has completed one year in the program.
- Students who have had calculus should take AGECE 5103 instead of ECON 5113. Students with no upper-division training in microeconomics should take ECON 3113 before taking ECON 5113.

Professional Internship Option

Total Hours: 36

Code	Title	Hours
Required Courses		
Select a minimum of 12 hours in Agricultural Economics not including AGECE 5000 or AGECE 5010: ¹		12
AGECE 5423	Agribusiness Management	
or AGECE 5043	Advanced Farm and Ranch Management	
AGECE 5603	Advanced Agricultural Finance	
MGMT 5113	Individual and Organizational Behavior	
STAT 5543	Applied Regression Analysis	
ECON 5113	Managerial Economics ²	
or AGECE 5103	Mathematical Economics	
Hours Subtotal		12
Electives		
Select 18 hours of electives.		18
Hours Subtotal		18
Professional Internship		
AGECE 5010	Professional Experience in Agricultural Economics or Agribusiness	6
Hours Subtotal		6
Total Hours		36

¹ Students with no background in accounting should take ACCT 5103. Students with strong skills in mathematics and statistics should take STAT 5543 in the fall instead of STAT 5013 and then take AGECE 5213 in the spring. The comprehensive final examination may be administered after the student has completed one year in the program.

² Students who have had calculus should take AGECE 5103 instead of ECON 5113. Students with no upper-division training in microeconomics should take ECON 3113 before taking ECON 5113.

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

General Agriculture: Agricultural Leadership, MAG

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 32

Code	Title	Hours
Required Courses		
AECL 5101	Orientation to Graduate Programs in Agricultural Education, Communications and Leadership	1
<i>Leadership</i>		
AGLE 5303	Foundations of Leadership Theory	3
AGLE 5353	Leadership in Agriculture	3
AGLE 6203	Extension Program Development	3
or AECL 5863	Methods of Technological Change	
Hours Subtotal		10
Electives		
Select 6 hours of AGED, AGLE or AGCM electives		6
Hours Subtotal		6
Electives/Area of Emphasis ¹		
Select 16 hours		16
Hours Subtotal		16
Total Hours		32

¹ Area of emphasis to be developed with student's committee.

Degree Requirement

- Totals must include a minimum of 21 hours of 5000 or higher credit and a maximum of 9 transfer credit hours.

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Geography, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 30

Code	Title	Hours
Required Courses		
GEOG 5001	Professional Development in Geography	1
GEOG 5303	Geographic Analysis I	3
GEOG 5403	Current Geographic Research	3
GEOG 5413	History and Philosophy of Geography	3
Hours Subtotal		10
Required Seminars		
<i>Group I Seminar (Human)</i>		
Select 3 hours from the following:		3
GEOG 5140	Seminar in Cultural Geography	
GEOG 5150	Geography of Sport, Recreation and Leisure Seminar	
GEOG 5443	Sustainable Tourism and Geography	
GEOG 6110	Seminar in Cultural and Political Ecology ¹	
GEOG 6120	Seminar in Urban Geography	
GEOG 6130	Seminar in Political Geography	
GEOG 6180	Seminar in Transportation Geography	
GEOG 6210	Seminar in Historical Geography	
<i>Group II Seminar (Physical)</i>		
Select 3 hours from the following:		3
GEOG 5023	Geography of Arid Lands	
GEOG 5063	Geoarchaeology and Environmental History	
GEOG 5073	Climate Change: Past, Present and Future	
GEOG 5083	Geography of Grass-Dominated Ecosystems	
GEOG 5113	Landscape Ecology	
GEOG 5123	International Resource Management	
GEOG 5163	Resource Management in the National Parks	
GEOG 5233	Human Dimensions of Global Environmental Change	
GEOG 6013	Seminar in Quaternary Paleoecology	
GEOG 6110	Seminar in Cultural and Political Ecology ¹	
Hours Subtotal		6
Electives		
Select 8 hours		8
Hours Subtotal		8
Thesis Hours		
GEOG 5000	Thesis	6
Hours Subtotal		6
Total Hours		30

¹ GEOG 6110 cannot satisfy both Group I and Group II requirements simultaneously.

Non-Thesis Option

Total Hours: 36

Code	Title	Hours
Required Courses		
GEOG 5001	Professional Development in Geography	1
GEOG 5303	Geographic Analysis I	3
GEOG 5403	Current Geographic Research	3
GEOG 5413	History and Philosophy of Geography	3
Hours Subtotal		10
Required Seminars		
<i>Group I Seminar (Human)</i>		
Select 3 hours from the following:		3
GEOG 5140	Seminar in Cultural Geography	
GEOG 5150	Geography of Sport, Recreation and Leisure Seminar	
GEOG 5443	Sustainable Tourism and Geography	
GEOG 6110	Seminar in Cultural and Political Ecology ¹	
GEOG 6120	Seminar in Urban Geography	
GEOG 6130	Seminar in Political Geography	
GEOG 6180	Seminar in Transportation Geography	
GEOG 6210	Seminar in Historical Geography	
<i>Group II Seminar (Physical)</i>		
Select 3 hours from the following:		3
GEOG 5023	Geography of Arid Lands	
GEOG 5063	Geoarchaeology and Environmental History	
GEOG 5073	Climate Change: Past, Present and Future	
GEOG 5083	Geography of Grass-Dominated Ecosystems	
GEOG 5113	Landscape Ecology	
GEOG 5123	International Resource Management	
GEOG 5163	Resource Management in the National Parks	
GEOG 5233	Human Dimensions of Global Environmental Change	
GEOG 6013	Seminar in Quaternary Paleoecology	
GEOG 6110	Seminar in Cultural and Political Ecology ¹	
Hours Subtotal		6
Electives		
Select 20 hours		20
Hours Subtotal		20
Total Hours		36

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Geology, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 30

Code	Title	Hours
Required Coursework		
GEOL 5243	Research Methods and Techniques in Geosciences	3
Select 21 hours of the following courses. Not to exceed 12 hours of GEOL 5990 "Advanced Studies in Geology." Maximum 9 hours can be transferred with "B" or better. Courses from other academic units can be taken with approval of MS student Research Committee. All courses are 3 hours.		21
GEOL 5093	Quaternary Geology and Geochronology	
GEOL 5183	Paleontology and Paleooceanographic Reconstruction	
GEOL 5223	Advanced Methods in Structural Geology	
GEOL 5213	Seismic Interpretation	
GEOL 5243	Research Methods and Techniques in Geosciences	
GEOL 5273	Depositional Systems	
GEOL 5283	Subsurface Geologic Methods	
GEOL 5353	Advanced Well Log Analysis	
GEOL 5363	Carbonate Depositional Systems	
GEOL 5383	Sequence Stratigraphy	
GEOL 5433	Isotope Geochemistry	
GEOL 5453	Groundwater Modeling	
GEOL 5463	Physical Hydrogeology	
GEOL 5483	Petroleum Water Management	
GEOL 5513	Marine Geology	
GEOL 5533	Organic Geochemistry	
GEOL 5543	Introduction to Exploration Seismology	
GEOL 5573	Marine Biogeochemical Cycles	
GEOL 5603	Basin Evolution	
GEOL 5633	Exploration Prospect Evaluation	
GEOL 5753	Volcanology	
GEOL 5773	Planetary Geology	
GEOL 5990	Advanced Studies in Geology	
GEOL 5990	Advanced Studies in Geology (Plate Tectonics)	
GEOL 5990	Advanced Studies in Geology (Spectral Signal Processing)	
GEOL 5990	Advanced Studies in Geology (Seismic Data Processing)	
GEOL 6103	Gravity and Magnetic Methods	
GEOL 6133	Unconventional Petroleum Reservoirs	
GEOL 6283	Geology of Shales	
GEOL 6303	Electrical and Electromagnetic Methods	
GEOL 6363	Carbonate Reservoir Characterization	
GEOL 6386	Sequence Stratigraphy of Shales	

GEOL 6553	Contaminant Hydrogeology	
Hours Subtotal		24
Thesis		
GEOL 5000	Master's Thesis	6
Hours Subtotal		6
Total Hours		30

Report Option

Total Hours: 32

Code	Title	Hours
Required Coursework		
GEOL 5990	Advanced Studies in Geology	3
Select 29 hours of the following courses. Maximum 9 hours can be transferred. All courses are 3 hours.		29
GEOL 5093	Quaternary Geology and Geochronology	
GEOL 5183	Paleontology and Paleooceanographic Reconstruction	
GEOL 5223	Advanced Methods in Structural Geology	
GEOL 5213	Seismic Interpretation	
GEOL 5243	Research Methods and Techniques in Geosciences	
GEOL 5273	Depositional Systems	
GEOL 5283	Subsurface Geologic Methods	
GEOL 5353	Advanced Well Log Analysis	
GEOL 5363	Carbonate Depositional Systems	
GEOL 5383	Sequence Stratigraphy	
GEOL 5433	Isotope Geochemistry	
GEOL 5453	Groundwater Modeling	
GEOL 5463	Physical Hydrogeology	
GEOL 5483	Petroleum Water Management	
GEOL 5513	Marine Geology	
GEOL 5533	Organic Geochemistry	
GEOL 5543	Introduction to Exploration Seismology	
GEOL 5573	Marine Biogeochemical Cycles	
GEOL 5603	Basin Evolution	
GEOL 5633	Exploration Prospect Evaluation	
GEOL 5753	Volcanology	
GEOL 5773	Planetary Geology	
GEOL 5990	Advanced Studies in Geology (Plate Tectonics)	
GEOL 5990	Advanced Studies in Geology (Spectral Signal Processing)	
GEOL 5990	Advanced Studies in Geology (Seismic Data Processing)	
GEOL 6103	Gravity and Magnetic Methods	
GEOL 6133	Unconventional Petroleum Reservoirs	
GEOL 6283	Geology of Shales	
GEOL 6303	Electrical and Electromagnetic Methods	
GEOL 6363	Carbonate Reservoir Characterization	
GEOL 6386	Sequence Stratigraphy of Shales	

Hours Subtotal	32
Total Hours	32

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Global Health, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 32

Code	Title	Hours
Global Health Core Courses		
HCA 5103	Introduction to Global Health	3
HCA 5143	Relief and Development in Global Health	3
HCA 5153	International Health Systems	3
HCA 5173	Emerging Global Infectious Diseases	3
Hours Subtotal		12
Elective Courses		
HCA 5183	Global Environmental and Occupational Health	3
HCA 5193	Health Aspects of Disasters	3
HCA 5273	Understanding Global Burden of Diseases	3
HCA 5020	Seminar in Global Health	3
HCA 5030	Problems and Issues in Global Health	3
HCA 5123	Survey of Research and Evaluation in Health Care	3
HCA 5052	Directed Readings in Health Care Administration	2
Hours Subtotal		20
Total Hours		32

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Global Studies, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 33

Code	Title	Hours
Core Course Requirements		
<i>Required Hours</i>		
GS 5013	Contemporary Issues in Global Studies	3
GS 5233	Global Competitive Environment	3
GS 5313	Global Communication and Public Diplomacy	3
GS 5413	Global Development	3
GS 5513	Global Crisis Management	3
<i>Research Hours</i>		
GS 5133	Research Design and Methods for Global Studies	3
Hours Subtotal		18
Focus Area Requirements		
Select 9 focus area hours		9
Select 6 Thesis hours		6
Hours Subtotal		15
Total Hours		33

Non-Thesis Option

Total Hours: 33

Code	Title	Hours
Core Course Requirements		
<i>Required Hours</i>		
GS 5013	Contemporary Issues in Global Studies	3
GS 5233	Global Competitive Environment	3
GS 5313	Global Communication and Public Diplomacy	3
GS 5413	Global Development	3
GS 5513	Global Crisis Management	3
<i>Research Hours</i>		
GS 5133	Research Design and Methods for Global Studies	3
Hours Subtotal		18
Focus Area Requirements		
Select 12 focus area hours		12
Select 3 Creative Component or Internship hours		3
Hours Subtotal		15
Total Hours		33

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Graphic Design, MFA

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 60

Code	Title	Hours
Core Requirements		
Students are required to take three core graduate level studio courses—Graphic Design Studio; Motion Design Studio; and Interaction Design Studio— three times for a total of 27 credit hours. Faculty will provide students with different design projects for each time they take a Studio. Three (3) additional Studio credits may be taken depending on the student’s Plan of Study (POS).		27
ART 5420	Graduate Graphic Design Studio	
ART 5450	Graduate Motion Design Studio	
ART 5460	Graduate Interaction Design Studio	
Hours Subtotal		27
Graphic Design History		
ART 5423	Graduate Study in Graphic Design History	3
Graphic Design Seminar		
ART 5440	Graduate Special Topics in Graphic Design	3
Teaching Practicum		
ART 5413	Graduate Teaching Practicum in Graphic Design	3
Thesis		
ART 5400	Graduate Study: Graphic Design Thesis	6
Art History		
Select 3 hours		3
Students will choose among the many graduate-level classes that are available in the Department of Art, Graphic Design and Art History, including Art 5920, Art History Seminar, Art 5613, Art Since 1960, Art 5833, History of Chinese Art, Art 5763, etc.		
Hours Subtotal		18
Electives		
Elective courses may include the following depending on the student’s Plan of Study:		15
Three (3) to six (6) credit hours of Graduate Level Courses: in Department of Art, Graphic Design and Art History; College of Education; Department of Design, Housing and Merchandising; Department of Computer Science		
Three (3) to six (6) credit hours of Graphic Design internship		
ART 5410	Graduate Graphic Design Internship	
Additional three (3) credit hours in Graduate Studio Class (Graphic Design, Motion Design and Interaction Design)		
ART 5420	Graduate Graphic Design Studio	
ART 5460	Graduate Interaction Design Studio	
Three (3) hours of thesis or Studio credits		
Hours Subtotal		15
Total Hours		60

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master’s Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Health and Human Performance: Applied Exercise Science, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 36

Code	Title	Hours
Core Courses		
LEIS 5023	Legal Aspects of Health, Physical Education and Leisure Services	3
REMS 5953	Statistical Methods in Education	3
REMS 5013 or HHP 5053	Research Design and Methodology Research Design in Leisure, Health and Human Performance	3
HHP 5523	Current Readings in Health	3
Hours Subtotal		12
Required Courses		
HHP 5853	Clin Ex Test & Prescript	3
HHP 5873	Human Bioenergetics	3
Hours Subtotal		6
Departmental Electives		
Select 12 hours from the following:		12
HLTH 5113	Psychological Aspects of Health	
HHP 5073	Psychological Aspects of Sport	
HHP 5733	Motor Learning	
HHP 5823	Applied Neuromuscular Anatomy and Physiology	
NSCI 5133	Advanced Nutrition for Exercise and Sport	
NSCI 5303	Human Nutrition and Metabolism I	
BIOL 5215	Mammalian Physiology	
HHP 5843	Quantitative Biomechanics and Kinesiology	
Hours Subtotal		12
Thesis		
HHP 5000	Master's Thesis	6
Total Hours		36

Non-Thesis Option

Total Hours: 33

Code	Title	Hours
Core Courses		
LEIS 5023	Legal Aspects of Health, Physical Education and Leisure Services	3
REMS 5953	Statistical Methods in Education	3
REMS 5013 or HHP 5053	Research Design and Methodology Research Design in Leisure, Health and Human Performance	3
HHP 5523	Current Readings in Health	3
Hours Subtotal		12

Required Courses		
HHP 5853	Clin Ex Test & Prescript	3
HHP 5873	Human Bioenergetics	3
Hours Subtotal		6
Departmental Electives		
Select 12 hours from the following:		12
HLTH 5113	Psychological Aspects of Health	
HHP 5073	Psychological Aspects of Sport	
HHP 5733	Motor Learning	
HHP 5823	Applied Neuromuscular Anatomy and Physiology	
NSCI 5133	Advanced Nutrition for Exercise and Sport	
NSCI 5303	Human Nutrition and Metabolism I	
BIOL 5215	Mammalian Physiology	
HHP 5843	Quantitative Biomechanics and Kinesiology	
Hours Subtotal		12
Creative Component		
HHP 5030	Field Problems in Health and Human Performance	3
Total Hours		33

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Health and Human Performance: Health Promotion, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 36

Code	Title	Hours
Core Courses		
LEIS 5023	Legal Aspects of Health, Physical Education and Leisure Services	3
REMS 5953	Statistical Methods in Education	3
REMS 5013 or HHP 5053	Research Design and Methodology Research Design in Leisure, Health and Human Performance	3
HHP 5523	Current Readings in Health	3
Hours Subtotal		12
Required Courses		
HLTH 5653	Foundations of Public Health Education and Promotion	3
HLTH 5683	Health Behavior Theory and Practice for Public Health	3
HLTH 5973	Designing Public Health Programs	3
HLTH 5983	Implementation and Evaluation of Public Health Programs	3
Hours Subtotal		12
Departmental Electives		
Select 6 hours of the following:		6
HLTH 5113	Psychological Aspects of Health	
HLTH 5453	Cultural Issues In Health	
HLTH 5133	Environmental Health	
HLTH 5233	Sexuality and Health	
HLTH 5323	General Epidemiology	
Hours Subtotal		6
Thesis		
HLTH 5000	Thesis Research	6
Hours Subtotal		6
Total Hours		36

Non-Thesis Option

Total Hours: 36

Code	Title	Hours
Core Courses		
LEIS 5023	Legal Aspects of Health, Physical Education and Leisure Services	3
REMS 5953	Statistical Methods in Education	3
REMS 5013 or HHP 5053	Research Design and Methodology Research Design in Leisure, Health and Human Performance	3
HHP 5523	Current Readings in Health	3

Hours Subtotal		12
Required Courses		
HLTH 5653	Foundations of Public Health Education and Promotion	3
HLTH 5683	Health Behavior Theory and Practice for Public Health	3
HLTH 5973	Designing Public Health Programs	3
HLTH 5983	Implementation and Evaluation of Public Health Programs	3
Hours Subtotal		12
Departmental Electives		
Select 9 hours of the following:		9
HLTH 5113	Psychological Aspects of Health	
HLTH 5453	Cultural Issues In Health	
HLTH 5133	Environmental Health	
HLTH 5233	Sexuality and Health	
HLTH 5323	General Epidemiology	
Hours Subtotal		9
Non-Thesis		
HLTH 5030	Field Experiences in Health Promotion	3
Hours Subtotal		3
Total Hours		36

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Health and Human Performance: Physical Education, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 36

Code	Title	Hours
Core Courses		
LEIS 5023	Legal Aspects of Health, Physical Education and Leisure Services	3
REMS 5953	Statistical Methods in Education	3
REMS 5013 or HHP 5053	Research Design and Methodology Research Design in Leisure, Health and Human Performance	3
HHP 5523	Current Readings in Health	3
Hours Subtotal		12
Required Courses		
Select approved courses.		6
Hours Subtotal		6
Departmental Electives		
Select 12 hours of the following:		12
HHP 5073	Psychological Aspects of Sport	
HHP 5733	Motor Learning	
HHP 5873	Human Bioenergetics	
CIED 5043	Issues in Teaching	
EPSY 5663	Creativity for Teachers	
Hours Subtotal		12
Thesis		
HHP 5000	Master's Thesis	6
Hours Subtotal		6
Total Hours		36

Non-Thesis Option

Total Hours: 33

Code	Title	Hours
Core Courses		
LEIS 5023	Legal Aspects of Health, Physical Education and Leisure Services	3
REMS 5953	Statistical Methods in Education	3
REMS 5013 or HHP 5053	Research Design and Methodology Research Design in Leisure, Health and Human Performance	3
HHP 5523	Current Readings in Health	3
Hours Subtotal		12
Required Courses		
Select approved courses.		6
Hours Subtotal		6
Departmental Electives		

Select 12 hours of the following:		12
HHP 5073	Psychological Aspects of Sport	
HHP 5733	Motor Learning	
HHP 5873	Human Bioenergetics	
CIED 5043	Issues in Teaching	
EPSY 5663	Creativity for Teachers	
Hours Subtotal		12
Non-Thesis		
HHP 5030	Field Problems in Health and Human Performance	3
Hours Subtotal		3
Total Hours		33

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Health Care Administration, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 32

Code	Title	Hours
Degree Core		
<i>Required Courses</i>		
HCA 5013	Survey of Health Care Administration	3
HCA 5033	Legal Issues in Health Care Administration	3
HCA 5093	Leadership Methods and Styles in Healthcare	3
HCA 5123	Survey of Research and Evaluation in Health Care	3
Hours Subtotal		12
Optional Electives		
Select 20 hours from the following:		20
HCA 5010	Special Topics in Health Care Administration (Clinical Operations Internship)	
HCA 5010	Special Topics in Health Care Administration	
HCA 5023	Human Resources in Health Care and Public Administration	
HCA 5043	Organizational Leadership and Development in Health Care	
HCA 5063	Health Care Compliance	
HCA 5052	Directed Readings in Health Care Administration	
HCA 5083	The Financial Structure of Health Care Organizations	
HCA 5103	Introduction to Global Health	
HCA 5113	Entrepreneurship and the Health Sciences	
HCA 5133	Health Care Informatics	
HCA 5143	Relief and Development in Global Health	
HCA 5153	International Health Systems	
HCA 5163	Healthcare Accounting and Auditing	
HCA 5173	Emerging Global Infectious Diseases	
HCA 5193	Health Aspects of Disasters	
HCA 5213	Advanced Cases in Healthcare Finance	
HCA 5223	Ethics in Healthcare	
HCA 5233	Advanced Leadership Methods and Styles in Healthcare	
HCA 5263	Patient Safety, Quality Measurement & Improvement	
HCA 5990	Internship in Health Care Administration	
Hours Subtotal		20
Total Hours		32

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

History, MA

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Plan I

Total Hours: 30

Code	Title	Hours
Required Courses		
Select 12 hours in a major field.		12
Select 9 hours from a minor field.		9
Hours Subtotal		21
Methods		
HIST 5023	Historical Methods	3
Hours Subtotal		3
Thesis		
HIST 5000	Thesis	6
Hours Subtotal		6
Total Hours		30

Plan II: Public History

Total Hours: 36

Code	Title	Hours
Required Courses		
HIST 5053	Museum Studies	3
or HIST 5063	Historic Preservation	
Select minimum of 9 hours of Seminar courses		9
Select courses per Plan of Study to complete degree requirements.		18
Hours Subtotal		30
Thesis		
HIST 5000	Thesis	6
Hours Subtotal		6
Total Hours		36

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Horticulture, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 30

Code	Title	Hours
Courses		
HORT 5020	Graduate Seminar	1
Select 3 hours of STAT at 5000-level or above		3
Select a minimum of 16 hours of additional HORT or related field (Plant Science, Soil Science, Plant Biology, Biochemistry or NREM)		16
Select 4 hours of HORT or related field		4
Hours Subtotal		24
Thesis		
HORT 5000	Master's Research and Thesis	6
Hours Subtotal		6
Total Hours		30

Formal Report Option

Total Hours: 36

Code	Title	Hours
Courses		
Select 28-34 hours (depending on whether 2 or 8 hours is taken in HORT 5110):		28-34
Select 3 hours of STAT in Undergraduate or Graduate transcript.		
HORT 5020	Graduate Seminar (1 hour)	
Select minimum of 16 hours of additional HORT or related field		
Select 8 to 14 hours from HORT or related field.		
Hours Subtotal		28-34
Thesis		
HORT 5110	Advanced Horticultural Problems	2-8
Hours Subtotal		2-8
Total Hours		36

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Hospitality and Tourism Management, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 32

Code	Title	Hours
Required Courses		
HTM 5112	Hospitality and Tourism Graduate Education and Research	2
HTM 5413	Hospitality Human Resources Management	3
or HTM 5323	Hospitality and Tourism Financial Management	
or HTM 5423	Hospitality and Tourism Marketing Management	
HTM 5513	Hospitality Strategic Management	3
HTM 5813	Research Methods in Hospitality and Tourism Administration	3
REMS 5953	Statistical Methods in Education	3
or STAT 5013	Statistics for Experimenters I	
Hours Subtotal		14
Electives		
Select 12 hours, 6 of which need to be HTM		12
<i>Hospitality and Tourism Management</i>		
HTM 5233	Convention and Special Event Management	
HTM 5263	Applied Revenue Management in Hospitality and Tourism Management	
HTM 5313	Hospitality and Tourism Information Technology	
HTM 5503	Big Data Analytics in Hospitality and Tourism Management	
HTM 5680	Seminar in Food Service Management	
HTM 5780	Seminar in Lodging Management	
HTM 5813	Research Methods in Hospitality and Tourism Administration	
HTM 5850	Special Topics in the Hospitality Industry	
(Recommended Outside Elective Courses)		
<i>Accounting and Finance</i>		
ACCT 5103	Seminar in Contemporary Accounting Theory I	
ACCT 5183	MBA Financial Reporting	
ACCT 5283	MBA Managerial Accounting	
ACCT 5603	Advanced Accounting-based Information Systems	
<i>Entrepreneurship</i>		
EEE 5223	Entrepreneurial Marketing	
EEE 5263	Corporate Entrepreneurship	
EEE 5313	Emerging Enterprise Consulting	
<i>Human Resources</i>		
MGMT 5133	Total Rewards	
MGMT 5153	Talent Development	

MGMT 5543	Human Resource Analytics	
MGMT 5823	Talent Acquisition	
LSB 5423	Employment Law	
<i>Management</i>		
MGMT 5113	Individual and Organizational Behavior	
MGMT 5123	Org Design & Research	
MGMT 5223	Seminar in Human Resource Management	
MGMT 5313	Project Management	
MGMT 5533	Leadership Challenges	
<i>Marketing</i>		
MKTG 5133	Marketing Management	
MKTG 5213	Services Marketing	
MKTG 5223	Entrepreneurial Marketing	
MKTG 5553	International Marketing Strategy	
MKTG 5613	Seminar in Consumer Behavior	
<i>Information and Technology</i>		
MSIS 5123	Enterprise Resource Planning	
MSIS 5133	Advanced Web Based Application Development	
MSIS 5623	Information and Network Technology Management	
MSIS 5633	Predictive Analytics Technologies	
Hours Subtotal		12
Thesis		
HTM 5000	Master's Thesis	6
Hours Subtotal		6
Total Hours		32

Non-Thesis Option

Total Hours: 32

Code	Title	Hours
Required Courses		
HTM 5112	Hospitality and Tourism Graduate Education and Research	2
HTM 5323	Hospitality and Tourism Financial Management	3
HTM 5413	Hospitality Human Resources Management	3
HTM 5513	Hospitality Strategic Management	3
BADM 5513	Fundamentals of Business Analytics	3
HTM 5423	Hospitality and Tourism Marketing Management	3
Hours Subtotal		17
Electives		
Select 15 hours, 9 of which must be HTM.		15
<i>Hospitality and Tourism Management</i>		
HTM 5233	Convention and Special Event Management	
HTM 5263	Applied Revenue Management in Hospitality and Tourism Management	
HTM 5313	Hospitality and Tourism Information Technology	
HTM 5503	Big Data Analytics in Hospitality and Tourism Management	

HTM 5680	Seminar in Food Service Management
HTM 5780	Seminar in Lodging Management
HTM 5813	Research Methods in Hospitality and Tourism Administration
HTM 5850	Special Topics in the Hospitality Industry
(Recommended Outside Elective Courses)	
<i>Accounting and Finance</i>	
ACCT 5103	Seminar in Contemporary Accounting Theory I
ACCT 5183	MBA Financial Reporting
ACCT 5283	MBA Managerial Accounting
ACCT 5603	Advanced Accounting-based Information Systems
<i>Entrepreneurship</i>	
EEE 5223	Entrepreneurial Marketing
EEE 5263	Corporate Entrepreneurship
EEE 5313	Emerging Enterprise Consulting
<i>Human Resources</i>	
MGMT 5133	Total Rewards
MGMT 5153	Talent Development
MGMT 5543	Human Resource Analytics
MGMT 5823	Talent Acquisition
LSB 5423	Employment Law
<i>Management</i>	
MGMT 5113	Individual and Organizational Behavior
MGMT 5123	Org Design & Research
MGMT 5223	Seminar in Human Resource Management
MGMT 5313	Project Management
MGMT 5533	Leadership Challenges
<i>Marketing</i>	
MKTG 5133	Marketing Management
MKTG 5213	Services Marketing
MKTG 5223	Entrepreneurial Marketing
MKTG 5553	International Marketing Strategy
MKTG 5613	Seminar in Consumer Behavior
<i>Information and Technology</i>	
MSIS 5123	Enterprise Resource Planning
MSIS 5133	Advanced Web Based Application Development
MSIS 5623	Information and Network Technology Management
MSIS 5633	Predictive Analytics Technologies
Hours Subtotal	15
Total Hours	32

Hospitality and Tourism Management Requirements

- 50% of coursework must be in Hospitality and Tourism Management (HTM).
- No fewer than 27 semester hours of 5000-level courses.
- A student can only take a maximum of 3 credit hours of independent study (HTM 5870).
- All coursework must be approved by the committee.

- A Hospitality Internship is required of all students (can be waived with appropriate industry experience by graduate admission committee).
- Students may transfer a maximum of nine graduate credit hours with a grade of "B" or better to OSU with the approval of their advisory committee and the Dean of the Graduate College.
- All requirements must be completed within 7 years. No course on plan of study may be more than 10 years old at the time of graduation.
- None of the leveling credit hours can be included in the plan of study.
- Students entering the MS degree program must have a BS/BA degree in hospitality and tourism management or a related field and relevant work experience. Prerequisite courses will be required for students with other degrees and limited professional experience.

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Human Development and Family Science: Applied Human Services, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 33

Code	Title	Hours
Degree Core		
HDFS 5213	Lifespan Development	3
HDFS 5513	Issues in Family Science	3
<i>Topics in Human Development and Family Science</i>		
Select 6 credit hours in HDFS to be selected from the following courses or approved by advisor:		6
HDFS 5153	Policy in Human Development and Family Science	
HDFS 5273	Parent Education	
HDFS 5283	Developmental Disabilities	
HDFS 5493	Aging and Diverse Families	
HDFS 5563	Community and Family	
Research Methods and Statistics		
HDFS 5173	Program Design, Implementation, and Evaluation in Human Development and Family Science	3
Practicum and Creative Component		
HDFS 5163	Master's Capstone in HDFS	3
Hours Subtotal		18
Electives		
Students work with their advisor to choose at least one elective.		3
Hours Subtotal		3
Other Requirements		
<i>Specialization Coursework</i>		
Specialization choices include: Infant Mental Health; Developmental Disabilities; Gerontology; Nonprofit Management		12
<i>Infant Mental Health</i>		
HDFS 5233	Infant Mental Health	
HDFS 5243	Infant and Early Childhood Development and Attachment	
HDFS 5343	Developmental Assessment and Interventions	
HDFS 5193	Reflective Practice	
<i>Developmental Disabilities</i>		
HDFS 5283	Developmental Disabilities	
HDFS 5623	Systems Theory and Applications to the Family	
HDFS 5653	Systemic Approaches to Psychopathology and Psychopharmacology	
HDFS 5193	Reflective Practice	
<i>Gerontology</i>		
Core Requirements		
HDFS 5423	Research Perspectives in Gerontology	

HDFS 5433 Theories of Aging

Select six hours of the following:

HDFS 5413 Aging in Human Development

HDFS 5483 Aging Network Seminar

HDFS 5493 Aging and Diverse Families

Nonprofit Management (graduate certificate offered from Spears School of Business)

MGMT 5093 Management of Nonprofit Organizations

MGMT 5163 Fundraising for Nonprofit Organizations

Select 6 hours of electives from Business:

MGMT 5031 Leading Organizational Change

MGMT 5051 Creating Ethical Work Places

MGMT 5061 Managing Confrontations

MGMT 5083 Corporate and Social Responsibility

MGMT 5533 Leadership Challenges

MGMT 5563 Crisis in Organizations

EEE 5403 Social Entrepreneurship

Hours Subtotal **12**

Total Hours **33**

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Human Development and Family Science: Developmental and Family Sciences, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 30

Code	Title	Hours
Required Courses		
<i>Theoretical Foundations in Human Development and Family Science</i>		
HDFS 5213	Lifespan Development	3
HDFS 5513	Issues in Family Science	3
<i>Topics in Human Development and Family Science</i>		
Select 6 credit hours in HDFS from the following courses or approved by advisor:		6
HDFS 5153	Policy in Human Development and Family Science	
HDFS 5273	Parent Education	
HDFS 5283	Developmental Disabilities	
HDFS 5493	Aging and Diverse Families	
HDFS 5563	Community and Family	
<i>Research Methods and Statistics</i>		
HDFS 5173	Program Design, Implementation, and Evaluation in Human Development and Family Science	3
HDFS 5133	Research Methods in HDFS II	3
Select 6 hours to be selected from the following courses and approved by advisor: ¹		6
STAT 5013	Statistics for Experimenters I	
STAT 5063	Statistical Machine Learning with R	
OR		
PSYC 5304	Quantitative Methods in Psychology I ¹	
PSYC 5314	Quantitative Methods in Psychology II ¹	
Hours Subtotal		24
Thesis		
HDFS 5000	Master's Thesis	6
Hours Subtotal		6
Total Hours		30

¹ If PSYC 5304 and PSYC 5314 are selected, total hours required for degree are increased by two.

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Human Development and Family Science: Early Childhood Education, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 30

Code	Title	Hours
Required Courses		
HDFS 5173	Program Design, Implementation, and Evaluation in Human Development and Family Science	3
HDFS 5213	Lifespan Development	3
HDFS 5513	Issues in Family Science	3
HDFS 5323	Issues in Early Childhood	3
HDFS 5333	Early Childhood Education History and Theory	3
HDFS 5343	Developmental Assessment and Interventions	3
HDFS 5363	Early Childhood Development and Education	3
Hours Subtotal		21
Individual Research or Creative Project (Requires MS Advisory Committee Approval)		
HDFS 5133	Research Methods in HDFS II	3
or REMS 5953	Statistical Methods in Education	
HDFS 5000	Master's Thesis	6
Hours Subtotal		9
Total Hours		30

Non-Thesis Option

Total Hours: 32

Code	Title	Hours
Required Courses		
HDFS 5173	Program Design, Implementation, and Evaluation in Human Development and Family Science	3
HDFS 5213	Lifespan Development	3
HDFS 5513	Issues in Family Science	3
HDFS 5323	Issues in Early Childhood	3
HDFS 5333	Early Childhood Education History and Theory	3
HDFS 5343	Developmental Assessment and Interventions	3
HDFS 5363	Early Childhood Development and Education	3
Hours Subtotal		21
Individual Research or Creative Project (Requires MS Advisory Committee Approval)		

Electives in HDFS or related areas	6	
HDFS 5160	Master's Creative Component	
Hours Subtotal		11
Total Hours		32

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Human Development and Family Science: Family and Community Services, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 36

Code	Title	Hours
Required Courses		
HDFS 5173	Program Design, Implementation, and Evaluation in Human Development and Family Science	3
HDFS 5213	Lifespan Development	3
HDFS 5223	Resilience in Individuals and Families	3
HDFS 5443	Interpersonal Relationships	3
HDFS 5543	Family Crisis and Trauma	3
HDFS 5553	Perspectives on Parenting and Parent Education	3
HDFS 5713	Individual and Family Resource Management	3
HDFS 5753	Leadership and Management of Community Service Programs	3
HDFS 5913	Foundations and Principles of Family and Community Services	3
HDFS 5923	Dynamics of Family Interaction	3
Hours Subtotal		30
Outside Electives		
Select three credit hours, approved by advisor		3
Hours Subtotal		3
Creative Component		
HDFS 5160	Master's Creative Component	3
Hours Subtotal		3
Total Hours		36

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Human Development and Family Science: Gerontology (Internet-Based Program), MS

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 36

Code	Title	Hours
Core Courses		
REMS 5953	Statistical Methods in Education	3
HDFS 5400	Professional Seminar in Gerontology	3
HDFS 5403	Perspectives in Gerontology	3
HDFS 5413	Aging in Human Development	3
HDFS 5493	Aging and Diverse Families	3
HS 5533	Economics of Aging and Public Policy	3
HS 5543	Environments and Aging	3
HS 5633	Program Evaluation and Research Methods in Gerontology	3
NSCI 5323	Nutrition and Physical Activity in Aging	3
EDHS 5240	Master's Creative Component	3
Hours Subtotal		30
Electives		
HDFS 5110	Directed Study in HDFS (or other designated elective)	3
HDFS 5110	Directed Study in HDFS (or other designated elective)	3
Hours Subtotal		6
Total Hours		36

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Human Development and Family Science: Gerontology (On Campus), MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 33

Code	Title	Hours
Gerontology		
HDFS 5423	Research Perspectives in Gerontology	3
HDFS 5433	Theories of Aging	3
HDFS 5493	Aging and Diverse Families	3
HDFS 5413	Aging in Human Development	3
HDFS 5483	Aging Network Seminar	3
Human Development and Family Science		
HDFS 5213	Lifespan Development	3
HDFS 5513	Issues in Family Science	3
Research Methods and Statistics		
HDFS 5173	Program Design, Implementation, and Evaluation in Human Development and Family Science	3
HDFS 5133	Research Methods in HDFS II	3
Thesis		
HDFS 5000	Master's Thesis	6
Total Hours		33

Non-Thesis Option

Total Hours: 33

Code	Title	Hours
Gerontology		
HDFS 5423	Research Perspectives in Gerontology	3
HDFS 5433	Theories of Aging	3
HDFS 5493	Aging and Diverse Families	3
HDFS 5413	Aging in Human Development	3
HDFS 5483	Aging Network Seminar	3
Human Development and Family Science		
HDFS 5213	Lifespan Development	3
HDFS 5513	Issues in Family Science	3
Research Methods and Statistics		
HDFS 5173	Program Design, Implementation, and Evaluation in Human Development and Family Science	3
Approved Elective		
	Select 3 hours of HDFS or related elective, to be approved by advisor.	3
Thesis		

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Human Development and Family Science: Marriage and Family Therapy, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 63

Code	Title	Hours
Required Courses		
<i>AREA I. Theoretical Foundations</i>		
HDFS 5613	Theoretical Models of Marriage and Family Therapy	3
HDFS 5623	Systems Theory and Applications to the Family	3
<i>AREA II. Clinical Practice</i>		
HDFS 5603	Pre-Practicum in Marriage and Family Therapy: Counseling Skills	3
HDFS 5633	Couples Treatment in Marriage and Family Therapy	3
HDFS 5643	Child and Adolescent Treatment in Marriage and Family Therapy	3
HDFS 5653	Systemic Approaches to Psychopathology and Psychopharmacology	3
<i>AREA III. Individual Development and Family Relations</i>		
HDFS 5213	Lifespan Development	3
HDFS 5513	Issues in Family Science	3
HDFS 5543	Family Crisis and Trauma	3
HDFS 5583	Intimate Relationships and Sexuality across the Lifespan	3
<i>AREA IV. Professional Identity and Ethics</i>		
HDFS 5663	Professionalism and Ethics in Marriage and Family Therapy	3
Standard Curriculum Clinical Experience Requirements		
HDFS 5690	Marriage and Family Therapy Practicum (Students will be continuously enrolled in practicum from their 2nd to their 7th semester. Students will continue to enroll in practicum after their 7th semester if needed until they complete the 500 client contact hours requirement and until they develop expected program competencies.)	18
<i>AREA V. Research</i>		
HDFS 5173	Program Design, Implementation, and Evaluation in Human Development and Family Science	3
Hours Subtotal		54
Thesis		
HDFS 5000	Master's Thesis	6
HDFS 5133	Research Methods in HDFS II	3

Hours Subtotal	9
Total Hours	63

Non-Thesis Option

Total Hours: 63

Code	Title	Hours
Required Courses		
<i>AREA I. Theoretical Foundations</i>		
HDFS 5613	Theoretical Models of Marriage and Family Therapy	3
HDFS 5623	Systems Theory and Applications to the Family	3
<i>AREA II. Clinical Practice</i>		
HDFS 5603	Pre-Practicum in Marriage and Family Therapy: Counseling Skills	3
HDFS 5633	Couples Treatment in Marriage and Family Therapy	3
HDFS 5643	Child and Adolescent Treatment in Marriage and Family Therapy	3
HDFS 5653	Systemic Approaches to Psychopathology and Psychopharmacology	3
<i>AREA III. Individual Development and Family Relations</i>		
HDFS 5213	Lifespan Development	3
HDFS 5513	Issues in Family Science	3
HDFS 5543	Family Crisis and Trauma	3
HDFS 5583	Intimate Relationships and Sexuality across the Lifespan	3
<i>AREA IV. Professional Identity and Ethics</i>		
HDFS 5663	Professionalism and Ethics in Marriage and Family Therapy	3
Standard Curriculum Clinical Experience Requirements		
HDFS 5690	Marriage and Family Therapy Practicum (Students will be continuously enrolled in practicum from their 2nd to their 7th semester. Students will continue to enroll in practicum after their 7th semester if needed until they complete the 500 client contact hours requirement and until they develop expected program competencies.)	18
<i>AREA V. Research</i>		
HDFS 5173	Program Design, Implementation, and Evaluation in Human Development and Family Science	3
Hours Subtotal		54
Non-Thesis		
HDFS 5160	Master's Creative Component	3
Approved Electives		
		6
Hours Subtotal		9
Total Hours		63

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic

regulations for minimal GPA, language proficiency and other general requirements.

Industrial Engineering and Management, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 30

Code	Title	Hours
Required Courses		
<i>Track Core</i>		
Select 12 approved hours.		12
Select 6 hours of track supporting courses.		6
Hours Subtotal		18
Thesis		
IEM 5000	Master's Research and Thesis	6
Hours Subtotal		6
Electives		
Select 6 hours of graduate courses approved by the advisory committee.		6
Hours Subtotal		6
Total Hours		30

Non-Thesis Option

Total Hours: 33

Code	Title	Hours
Required Courses		
<i>Track Core Courses</i>		
Select 12 approved hours.		12
Select 12 hours of track-supporting courses.		12
Hours Subtotal		24
Electives		
Select one of the three options		9
<i>Coursework Only Option (9 hours)</i>		
Select 9 hours of graduate courses approved by the advisory committee.		
<i>Independent Study Option (9 hours)</i>		
Select 6 hours of graduate courses approved by the advisory committee.		
IEM 5350	Industrial Engineering Problems	
<i>Internship/Practicum Option (9 hours)</i>		
Select 3 to 6 hours of IEM 5020 and/or IEM 5030.		
IEM 5020	Graduate Engineering Practicum	
IEM 5030	Engineering Practice	
Select 3-6 hours from graduate courses approved by the advisory committee.		
Hours Subtotal		9
Total Hours		33

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Industrial Engineering and Management: Operations Research and Analytics, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 30

Code	Title	Hours
Common Core		
IEM 5003	Probability and Statistics for Engineers	3
IEM 5013	Introduction to Optimization	3
IEM 5703	Discrete System Simulation	3
Hours Subtotal		9
Specialty Core Courses		
IEM 5063	Network Optimization	3
IEM 5133	Stochastic Processes	3
IEM 5723	Data, Process and Object Modeling	3
Hours Subtotal		9
Electives		
Select six hours (including at least one IEM graduate-level course)		6
Hours Subtotal		6
Thesis		
IEM 5000	Master's Research and Thesis	6
Hours Subtotal		6
Total Hours		30

Non-Thesis Option

Total Hours: 33

Code	Title	Hours
Common Core		
IEM 5003	Probability and Statistics for Engineers	3
IEM 5013	Introduction to Optimization	3
IEM 5703	Discrete System Simulation	3
Hours Subtotal		9
Specialty Core Courses		
IEM 5063	Network Optimization	3
IEM 5133	Stochastic Processes	3
IEM 5723	Data, Process and Object Modeling	3
Hours Subtotal		9
Electives		
Select six hours (including at least one IEM graduate-level course)		6
Hours Subtotal		6
Additional Requirements		
Select one of the following options:		9
<i>Option 1</i>		

9 hours of additional approved electives

Option 2

IEM 5350 Industrial Engineering Problems

6 hours of additional approved electives

Option 3

3-6 hours of IEM 5020 and/or IEM 5030 plus additional electives to equal 9 hours

Hours Subtotal	9
Total Hours	33

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Industrial Engineering and Management: Supply Chain and Logistics, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 30

Code	Title	Hours
Common Core		
IEM 5003	Probability and Statistics for Engineers	3
IEM 5013	Introduction to Optimization	3
IEM 5703	Discrete System Simulation	3
Hours Subtotal		9
Specialty Core Courses		
IEM 5203	Facility Location, Warehousing and Transportation	3
IEM 5633	Advanced Production and Inventory Control	3
IEM 5763	Supply Chain Strategy	3
Hours Subtotal		9
Electives		
Select six hours (including at least one IEM graduate-level course)		6
Hours Subtotal		6
Thesis		
IEM 5000	Master's Research and Thesis	6
Hours Subtotal		6
Total Hours		30

Non-Thesis Option

Total Hours: 33

Code	Title	Hours
Common Core		
IEM 5003	Probability and Statistics for Engineers	3
IEM 5013	Introduction to Optimization	3
IEM 5703	Discrete System Simulation	3
Hours Subtotal		9
Specialty Core Courses		
IEM 5203	Facility Location, Warehousing and Transportation	3
IEM 5633	Advanced Production and Inventory Control	3
IEM 5763	Supply Chain Strategy	3
Hours Subtotal		9
Electives		
Select six hours (including at least one IEM graduate-level course)		6
Hours Subtotal		6
Additional Requirements		

Select one of the following options: 9

Option 1

9 hours of additional approved electives

Option 2

IEM 5350 Industrial Engineering Problems

6 hours of additional approved electives

Option 3

3-6 hours of IEM 5020 and/or IEM 5030 plus additional electives to equal 9 hours

Hours Subtotal 9

Total Hours 33

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Integrative Biology, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 30

Code	Title	Hours
Required Courses		
Select 24 hours of 5000-level courses or seminars, not including BIOL 5000. ¹		24
Thesis		
BIOL 5000	Research for Master's Thesis	6
Total Hours		30

¹ Select a minimum of 15 hours of 5000-level courses or seminars, not including BIOL 5000 from one of the following prefixes: BIOL, MICR, PBIO, NREM, PSYC, ANSI, GEOG, GEOL, RES, ITOX, VBSC, VMED, ENTO, STAT, SMED, REMS, BIOC, MATH, ENVR, CHEM, BIOM, AGEC, AGED, NSCI, PLP, PLNT, HS, HDF5

Formal Report Option

Total Hours: 32

Code	Title	Hours
Required Courses		
Select a minimum of 28 hours of 5000-level courses or seminars, not including BIOL 5000. ¹		28
Hours Subtotal		28
Seminar Courses		
Select a minimum of two seminar classes.		2
Hours Subtotal		2
Report		
2 hours of formal report		2
Hours Subtotal		2
Total Hours		32

¹ Select a minimum of 15 hours of 5000-level courses or seminars, not including BIOL 5000 from one of the following prefixes: BIOL, MICR, PBIO, NREM, PSYC, ANSI, GEOG, GEOL, RES, ITOX, VBSC, VMED, ENTO, STAT, SMED, REMS, BIOC, MATH, ENVR, CHEM, BIOM, AGEC, AGED, NSCI, PLP, PLNT, HS, HDF5

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Interdisciplinary Studies, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 30

Code	Title	Hours
Thesis		
	6 Hours of Thesis	6
Hours Subtotal		6
Other Requirements		
	Select 24 hours based on plan of study:	24
Hours Subtotal		24
Total Hours		30

Non-Thesis Option

Total Hours: 32

Code	Title	Hours
Required Coursework		
	Select no more than 3 hours of research with a grade of "SR."	1-3
	Select courses based on plan of study	29-31
Total Hours		32

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

International Agriculture, MAG

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Creative Component Option

Total Hours: 36

Code	Title	Hours
Coursework		
	Select 30 Hours of approved coursework to complete Plan of Study requirements	30
Hours Subtotal		30
International Experience		
	Select 6 hours	6
Hours Subtotal		6
Total Hours		36

Professional Internship Option

Total Hours: 36

Code	Title	Hours
Coursework		
	Select 30 Hours of approved coursework to complete Plan of Study requirements	30
Hours Subtotal		30
Professional Internship		
	Select 6 hours	6
Hours Subtotal		6
Choose Focus Area		
Total Hours		36

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

International Agriculture, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 30

Code	Title	Hours
Course Requirements		
AGIN 5312	Applied Issues in International Agriculture and Natural Resources	2
Select at least one course from each of the following three categories:		12
<i>Quantitative/Statistics (choose one course)</i>		
ECON 5213	Introduction to Econometrics	
REMS 5013	Research Design and Methodology	
STAT 5543	Applied Regression Analysis	
STAT 5013	Statistics for Experimenters I	
Or other approved quantitative course		
AECL 5983	Social Sciences Research in Agricultural Sciences and Natural Resources	
<i>Research Methodology (choose one course)</i>		
AGEC 5101	Research Methodology	
HORT 5233	Experimental Horticulture	
SOIL 5112	Research Methods in Plant and Soil Sciences	
Or other approved quantitative or qualitative research methods course		
<i>International Agriculture (choose two courses)</i>		
AECL 5863	Methods of Technological Change	
AGEC 5343	International Agricultural Markets and Trade	
AGEC 5723	Plan & Pol Devlpmnt	
AGED 5203	Grant Seeking	
AGLE 5303	Foundations of Leadership Theory	
EEE 5403	Social Entrepreneurship	
NSCI 5553	Global Nutrition and Food Security	
PLNT 5313	Simulation Models in Research, Management and Policy	
Or other approved courses in international agriculture or development		
Hours Subtotal		14
Focus Areas		
With advisor approval, select at least 10 semester credit hours to support a focus area in International Agriculture.		10
Hours Subtotal		10
Thesis		
AGIN 5000	Master's Thesis/Report in International Agriculture	6
Hours Subtotal		6
Total Hours		30

Formal Report Option

Total Hours: 32

Code	Title	Hours
Course Requirements		
AGIN 5312	Applied Issues in International Agriculture and Natural Resources	2
Select at least one course from each of the following three categories:		12
<i>Quantitative/Statistics (choose one course)</i>		
ECON 5213	Introduction to Econometrics	
REMS 5013	Research Design and Methodology	
STAT 5543	Applied Regression Analysis	
STAT 5013	Statistics for Experimenters I	
Or other approved quantitative course		
<i>Research Methodology (choose one course)</i>		
AECL 5983	Social Sciences Research in Agricultural Sciences and Natural Resources	
AGEC 5101	Research Methodology	
HORT 5233	Experimental Horticulture	
SOIL 5112	Research Methods in Plant and Soil Sciences	
Or other approved quantitative or qualitative research methods course		
<i>International Agriculture (choose two courses)</i>		
AECL 5863	Methods of Technological Change	
AGEC 5343	International Agricultural Markets and Trade	
AGEC 5723	Plan & Pol Devlpmnt	
AGED 5203	Grant Seeking	
AGLE 5303	Foundations of Leadership Theory	
EEE 5403	Social Entrepreneurship	
NSCI 5553	Global Nutrition and Food Security	
PLNT 5313	Simulation Models in Research, Management and Policy	
Or other approved courses in international agriculture or development		
Hours Subtotal		14
Focus Areas		
With advisor approval, select at least 16 semester credit hours to support a focus area in International Agriculture.		16
Hours Subtotal		16
Research		
AGIN 5000	Master's Thesis/Report in International Agriculture	2
Hours Subtotal		2
Total Hours		32

Creative Component

Total Hours: 32

Code	Title	Hours
Course Requirements		
AGIN 5312	Applied Issues in International Agriculture and Natural Resources	2
Select at least one course from each of the following three categories:		12
<i>Quantitative/Statistics (choose one course)</i>		
ECON 5213	Introduction to Econometrics	
REMS 5013	Research Design and Methodology	
STAT 5543	Applied Regression Analysis	
STAT 5013	Statistics for Experimenters I	
Or other approved quantitative course		
<i>Research Methodology (choose one course)</i>		
AECL 5983	Social Sciences Research in Agricultural Sciences and Natural Resources	
AGEC 5101	Research Methodology	
HORT 5233	Experimental Horticulture	
SOIL 5112	Research Methods in Plant and Soil Sciences	
Or other approved quantitative or qualitative research methods course		
<i>International Agriculture (choose two courses)</i>		
AECL 5863	Methods of Technological Change	
AGEC 5343	International Agricultural Markets and Trade	
AGEC 5723	Plan & Pol Devlpmnt	
AGED 5203	Grant Seeking	
AGLE 5303	Foundations of Leadership Theory	
EEE 5403	Social Entrepreneurship	
NSCI 5553	Global Nutrition and Food Security	
PLNT 5313	Simulation Models in Research, Management and Policy	
Or other approved courses in international agriculture or development		
Hours Subtotal		14
Focus Areas		
With advisor approval, select at least 15 semester credit hours to support a focus area in International Agriculture.		15
Hours Subtotal		15
Creative Component		
AGIN 5800	International Agriculture Internship Experience (Creative Component)	3
Hours Subtotal		3
Total Hours		32

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Leisure Studies, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 36

Code	Title	Hours
Research and Inquiry		
REMS 5953	Statistical Methods in Education	3
REMS 5013	Research Design and Methodology	3
Hours Subtotal		6
Core Courses		
LEIS 5023	Legal Aspects of Health, Physical Education and Leisure Services	3
LEIS 5413	Organization and Administration of Recreation and Leisure Services	3
LEIS 5433	Current Issues in Leisure Services	3
LEIS 5443	Social Foundations of Leisure Services	3
Hours Subtotal		12
Cognate		
Select 12 hours, which may include RMRT and LEIS courses, to form a cognate appropriate to the student's goals:		12
RMRT 4453	Outdoor Education and Interpretation	
RMRT 4463	Areas and Facilities In Recreation Management	
RMRT 4473	Recreation In the Natural Environment	
RMRT 4493	Administration of Recreation Services	
RMRT 4553	Tourism in Recreation Settings	
RMRT 4563	Entrepreneurial Recreation Management	
RMRT 4943	Grant Writing and Nonprofit Management	
LEIS 5030	Field Problems in Recreation Management	
LEIS 5073	Recreational Therapy and Geriatrics	
LEIS 5403	Outdoor Recreation	
LEIS 5423	Supervision of Recreation Management People and Programs	
LEIS 5483	Recreational Therapy for Persons with Physical Disabilities	
LEIS 5493	Recreational Therapy in Mental Health and Intellectual Disabilities	
And other courses as approved by the student's graduate committee.		
Hours Subtotal		12
Thesis		
LEIS 5000	Master's Thesis	6
Hours Subtotal		6
Total Hours		36

Non-Thesis Option

Total Hours: 36

Code	Title	Hours
Research and Inquiry		
REMS 5953	Statistical Methods in Education	3
REMS 5013	Research Design and Methodology	3
Hours Subtotal		6
Core Courses		
LEIS 5023	Legal Aspects of Health, Physical Education and Leisure Services	3
LEIS 5413	Organization and Administration of Recreation and Leisure Services	3
LEIS 5433	Current Issues in Leisure Services	3
LEIS 5443	Social Foundations of Leisure Services	3
Hours Subtotal		12
Cognate		
Select 18 hours, which may include RMRT and LEIS courses, to form a cognate appropriate to the student's goals:		18
RMRT 4453	Outdoor Education and Interpretation	
RMRT 4463	Areas and Facilities In Recreation Management	
RMRT 4473	Recreation In the Natural Environment	
RMRT 4493	Administration of Recreation Services	
RMRT 4553	Tourism in Recreation Settings	
RMRT 4563	Entrepreneurial Recreation Management	
RMRT 4943	Grant Writing and Nonprofit Management	
LEIS 5030	Field Problems in Recreation Management	
LEIS 5073	Recreational Therapy and Geriatrics	
LEIS 5403	Outdoor Recreation	
LEIS 5423	Supervision of Recreation Management People and Programs	
LEIS 5483	Recreational Therapy for Persons with Physical Disabilities	
LEIS 5493	Recreational Therapy in Mental Health and Intellectual Disabilities	
And other courses as approved by the student's graduate committee.		
Hours Subtotal		18
Total Hours		36

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Management Information Systems, MS

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 33

Code	Title	Hours
Degree Core		
<i>Required Courses</i>		
MSIS 5193	Programming for Data Science and Analytics I	3
MSIS 5213	Information Assurance Management	3
MSIS 5633	Predictive Analytics Technologies	3
MSIS 5663	Data Warehousing	3
MSIS 5693	Digital Transformation Strategy	3
MSIS 5713	Scripting Essentials	3
MSIS 5900	Practicum in Management Information Systems (Part-time students can replace with alternative 5000-level course)	3
Hours Subtotal		21
Electives¹		
Select 12 Hours of Electives		12
<i>Suggested Electives</i>		
MSIS 5033	Information Systems Project Management	
MSIS 5133	Advanced Web Based Application Development	
MSIS 5213	Information Assurance Management	
MSIS 5243	Information Technology Forensics	
MSIS 5273	Legal and Ethical Issues in Information Technology	
MSIS 5303	Prescriptive Analytics	
MSIS 5633	Predictive Analytics Technologies	
MSIS 5683	Big Data Advanced Analytics Technologies	
MSIS 5950	Advanced Practicum	
Hours Subtotal		12
Total Hours		33

¹ Appropriate substitutes, such as other upper-division Spears School of Business courses or upper-division courses from other colleges, can be made on a case-by-case basis.

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Management Information Systems: Big Data Analytics, MS

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 33

Code	Title	Hours
Common Core		
MSIS 5193	Programming for Data Science and Analytics I	3
MSIS 5213	Information Assurance Management	3
MSIS 5633	Predictive Analytics Technologies	3
MSIS 5663	Data Warehousing	3
MSIS 5693	Digital Transformation Strategy	3
MSIS 5713	Scripting Essentials	3
MSIS 5900	Practicum in Management Information Systems	3
Hours Subtotal		21
Electives		
Select 9 hours from the following:		9
MSIS 5223	Programming for Data Science and Analytics II	
MSIS 5303	Prescriptive Analytics	
MSIS 5313	Supply Chain Analytics	
MSIS 5503	Statistics for Data Science	
MSIS 5673	Descriptive Analytics and Visualization	
MSIS 5683	Big Data Advanced Analytics Technologies	
Select 3 hours from approved electives (including those listed above):		3
MSIS 5203	Advanced Infrastructure Development	
MSIS 5233	Applied Information Systems Security	
MSIS 5253	Advanced System Certification and Accreditation	
MSIS 5273	Legal and Ethical Issues in Information Technology	
Appropriate substitutions can be made on a case-by-case basis.		
Hours Subtotal		12
Total Hours		33

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Management Information Systems: Cybersecurity, MS

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 33

Code	Title	Hours
Common Core		
MSIS 5193	Programming for Data Science and Analytics I	3
MSIS 5213	Information Assurance Management	3
MSIS 5633	Predictive Analytics Technologies	3
MSIS 5663	Data Warehousing	3
MSIS 5693	Digital Transformation Strategy	3
MSIS 5713	Scripting Essentials	3
MSIS 5900	Practicum in Management Information Systems	3
Hours Subtotal		21
Electives		
Select 9 hours from the following:		9
MSIS 5203	Advanced Infrastructure Development	
MSIS 5233	Applied Information Systems Security	
MSIS 5253	Advanced System Certification and Accreditation	
MSIS 5273	Legal and Ethical Issues in Information Technology	
Select 3 hours from approved electives (including those listed above):		3
MSIS 5223	Programming for Data Science and Analytics II	
MSIS 5303	Prescriptive Analytics	
MSIS 5313	Supply Chain Analytics	
MSIS 5503	Statistics for Data Science	
MSIS 5673	Descriptive Analytics and Visualization	
MSIS 5683	Big Data Advanced Analytics Technologies	
Appropriate substitutions can be made on a case-by-case basis.		
Hours Subtotal		12
Total Hours		33

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Management Information Systems: Health Analytics, MS

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 33

Code	Title	Hours
Common Core		
MSIS 5193	Programming for Data Science and Analytics I	3
MSIS 5213	Information Assurance Management	3
MSIS 5633	Predictive Analytics Technologies	3
MSIS 5663	Data Warehousing	3
MSIS 5693	Digital Transformation Strategy	3
MSIS 5713	Scripting Essentials	3
MSIS 5900	Practicum in Management Information Systems	3
Hours Subtotal		21
Health Analytics Requirements		
HCA 5013	Survey of Health Care Administration	3
Hours Subtotal		3
Electives		
Select 6 hours from the following:		6
MSIS 5223	Programming for Data Science and Analytics II	
MSIS 5303	Prescriptive Analytics	
MSIS 5313	Supply Chain Analytics	
MSIS 5673	Descriptive Analytics and Visualization	
MSIS 5683	Big Data Advanced Analytics Technologies	
Select 3 hours from approved electives (including those listed above):		3
MSIS 5203	Advanced Infrastructure Development	
MSIS 5233	Applied Information Systems Security	
MSIS 5253	Advanced System Certification and Accreditation	
MSIS 5273	Legal and Ethical Issues in Information Technology	
MSIS 5503	Statistics for Data Science	
Appropriate substitutions can be made on a case-by-case basis.		
Hours Subtotal		9
Total Hours		33

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Mass Communications, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 31

Code	Title	Hours
Core Courses		
MC 5651	Introduction to Graduate Study in Mass Communications	1
MC 5113	Methods of Research in Mass Communication	3
MC 5333	Media Theory	3
MC 5733	Responsibility in Mass Communication	3
Hours Subtotal		10

Concentration

Select one of the following tracks: 15

Brand Communication

MC 5223	Mass Communication Research Analysis and Interpretation ¹	
MC 5933	Theories of Persuasion	
MC 5770	Seminar in Communication Media	
MC 5613	Storytellers Studio	
MC 5030	Independent Study in Mass Communication	
MC 5020	Advanced Practicum or Internship in Mass Communication	
MC 5520	Specialized Strategic Communications Applications	
MC 5853	Strategic Communication Management	
MC 5603	Integrated Marketing Communication	
MC 5383	Media Relations	
MC 5753	Media And Elections	
Other approved graduate-level electives (6 hours maximum)		

Sports Communication

MC 5223	Mass Communication Research Analysis and Interpretation	
MC 5933	Theories of Persuasion	
MC 5770	Seminar in Communication Media	
MC 5613	Storytellers Studio	
MC 5030	Independent Study in Mass Communication	
MC 5020	Advanced Practicum or Internship in Mass Communication	
MC 5883	Media Management	
MC 5383	Media Relations	
MC 5143	Diversity In Sports Media	

Global Communications

MC 5223	Mass Communication Research Analysis and Interpretation ¹	
MC 5933	Theories of Persuasion	

MC 5770	Seminar in Communication Media	
MC 5613	Storytellers Studio	
MC 5030	Independent Study in Mass Communication	
MC 5020	Advanced Practicum or Internship in Mass Communication	
MC 5253	International Mass Communication	
MC 5540	Specialized Multimedia Journalism Applications	
MC 5753	Media And Elections	
MC 5163	Mass Communication Law	
MC 5773	Censorship	
MC Elective		
Other approved graduate-level elective (6 hours max)		
Hours Subtotal		15
Thesis		
MC 5000	Thesis	6
Hours Subtotal		6
Total Hours		31

¹ An advanced research course is required for thesis track.

Non-Thesis Option

Total Hours: 32

Code	Title	Hours
Core Courses		
MC 5651	Introduction to Graduate Study in Mass Communications	1
MC 5113	Methods of Research in Mass Communication	3
MC 5333	Media Theory	3
MC 5733	Responsibility in Mass Communication	3
Hours Subtotal		10

Concentration

Select one of the following tracks: 15

Brand Communication

MC 5223	Mass Communication Research Analysis and Interpretation	
MC 5933	Theories of Persuasion	
MC 5770	Seminar in Communication Media	
MC 5613	Storytellers Studio	
MC 5030	Independent Study in Mass Communication	
MC 5020	Advanced Practicum or Internship in Mass Communication	
MC 5520	Specialized Strategic Communications Applications	
MC 5853	Strategic Communication Management	
MC 5603	Integrated Marketing Communication	
MC 5383	Media Relations	
MC 5753	Media And Elections	
Other approved graduate-level elective (6 hours max)		

Sports Communication

MC 5223	Mass Communication Research Analysis and Interpretation	
MC 5933	Theories of Persuasion	
MC 5770	Seminar in Communication Media	
MC 5613	Storytellers Studio	
MC 5030	Independent Study in Mass Communication	
MC 5020	Advanced Practicum or Internship in Mass Communication	
MC 5883	Media Management	
MC 5383	Media Relations	
MC 5143	Diversity In Sports Media	
<i>Global Communication</i>		
MC 5223	Mass Communication Research Analysis and Interpretation	
MC 5933	Theories of Persuasion	
MC 5770	Seminar in Communication Media	
MC 5613	Storytellers Studio	
MC 5030	Independent Study in Mass Communication	
MC 5020	Advanced Practicum or Internship in Mass Communication	
MC 5253	International Mass Communication	
MC 5540	Specialized Multimedia Journalism Applications	
MC 5753	Media And Elections	
MC 5163	Mass Communication Law	
MC 5773	Censorship	
MC Elective		
Other graduate-level elective (6 hours max)		
Hours Subtotal		15
Non-Thesis Options		
Select from the following options:		7
<i>Creative Component</i>		
MC 5010	Capstone Creative Project (4 hours)	
MC Elective (3 hours)		
<i>Practicum</i>		
MC 5020	Advanced Practicum or Internship in Mass Communication (6 hours)	
Formal Report (1 hour)		
<i>Study Abroad</i>		
MC 5030	Independent Study in Mass Communication (6 hours)	
Formal Report (1 hour)		
Hours Subtotal		7
Total Hours		32

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Materials Science and Engineering, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 30

Code	Title	Hours
Required Courses		
MSE 5010	Materials Science and Engineering Seminar for Masters Students	0
MSE 5013	Advanced Thermodynamics of Materials	3
MSE 5023	Diffusion and Kinetics	3
MSE 5043	Advanced Materials Characterization	3
MSE 5093	Fundamentals of Materials Science	3
MSE 5193	Advanced Materials Processing	3
Hours Subtotal		15
Electives		
Select 9 hours of the following:		9
MSE 5030	Independent Study in Materials Science and Engineering	
MSE 5053	Smart Materials	
MSE 5063	Biomedical Materials	
MSE 5073	Tissue Engineering	
MSE 5093	Fundamentals of Materials Science ¹	
MSE 5103	Electrical and Optical Properties of Ceramics	
MSE 5113 or MAE 5113	Diffraction in Materials	
MSE 5123	Advanced Composites Manufacturing: Materials, Methods and Applications	
MSE 5133	Solid Oxide Fuel Cells	
MSE 5143	Batteries and Supercapacitors for Energy Storage	
MSE 5153	Crystal Physics and Materials Properties	
MSE 5173	Organic Electronic Materials and Devices	
MSE 5174	Fundamentals of Photovoltaics	
MSE 5193	Advanced Materials Processing ¹	
MSE 5200 or EEE 5200	Applied Innovation I Special Topics in Entrepreneurship	
MSE 5223	Additive Manufacturing: Materials, Methods and Applications	
MSE 5553	Fatigue and Fracture	
MSE 5583 or MAE 5583	Corrosion Engineering	
MSE 5693 or MAE 5693	Phase Transformations in Materials	
MSE 5683 or MAE 5683	Thermodynamics and Thermostatistics of Materials	

MAE 5503 Mechanics of Advanced Composites for Structural Design

MAE 5543 Modern Materials

ECEN 5843 Microelectronic Fabrication

ECEN 6843 Advanced Microelectronic Fabrication

The following related MS&E graduate courses currently offered in various departments at OSU are also available to satisfy degree requirements. MSE program approval will be required for registration

Chemistry

CHEM 5223 Polymer Chemistry

CHEM 5263 Foundations of Inorganic Chemistry

CHEM 5283 Solid State Chemistry

CHEM 6113 Analytical Spectroscopy

CHEM 5623 Quantum Chemistry I

CHEM 5963 Advanced Inorganic Chemistry

Physics

PHYS 5613 Quantum Mechanics I

PHYS 5663 Solid State Physics I

PHYS 5713 Solid State Physics II

PHYS 5960 Problems in Chemical Physics

PHYS 6243 Semiconductors I

PHYS 6313 Quantum Mechanics II

Biological/Health Science

BIOM 6175 Molecular And Cellular Biology

Chemical Engineering

CHE 5283 Advanced Bioprocess Engineering

CHE 5293 Advanced Biomedical Engineering

Electrical and Computer Engineering

ECEN 6840 Photonics III: Microscopy I

ECEN 6843 Advanced Microelectronic Fabrication

ECEN 6840 Photonics III: Microscopy I

ECEN 6850 Photonics III: Microscopy II

ECEN 6860 Photonics III: Microscopy III and Image Processing

ECEN 6890 Photonics IV: Semiconductor Synthesis and Devices III

Mechanical and Aerospace Engineering

MAE 5143 Tribology

MAE 5243 Micro Flows

MAE 5573 Continuum Mechanics

MAE 5633 Advanced Thermal Energy Systems Analysis

MAE 5993 Microstructural Mechanics

MAE 6133 Surface Mechanics

Hours Subtotal **9**

Thesis Research

6 hours of MSE 5000 **6**

Hours Subtotal **6**

Total Hours **30**

¹ With departmental approval, these courses may be substituted for a required MSE course.

Non-Thesis Option

Total Hours: 35

Code	Title	Hours
Required Courses		
MSE 5010	Materials Science and Engineering Seminar for Masters Students	0
MSE 5013	Advanced Thermodynamics of Materials	3
MSE 5023	Diffusion and Kinetics	3
MSE 5043	Advanced Materials Characterization	3
MSE 5093	Fundamentals of Materials Science	3
MSE 5193	Advanced Materials Processing	3
Hours Subtotal		15
Electives		
Select 18 hours of the following:		18
<i>Materials Science and Engineering</i>		
MSE 5030	Independent Study in Materials Science and Engineering	
MSE 5053	Smart Materials	
MSE 5063	Biomedical Materials	
MSE 5073	Tissue Engineering	
MSE 5093	Fundamentals of Materials Science ¹	
MSE 5103	Electrical and Optical Properties of Ceramics	
MSE 5113 or MAE 5113	Diffraction in Materials	
MSE 5123	Advanced Composites Manufacturing: Materials, Methods and Applications	
MSE 5133	Solid Oxide Fuel Cells	
MSE 5143	Batteries and Supercapacitors for Energy Storage	
MSE 5153	Crystal Physics and Materials Properties	
MSE 5173	Organic Electronic Materials and Devices	
MSE 5174	Fundamentals of Photovoltaics	
MSE 5193	Advanced Materials Processing ¹	
MSE 5200 or EEE 5200	Applied Innovation I Special Topics in Entrepreneurship	
MSE 5223	Additive Manufacturing: Materials, Methods and Applications	
MSE 5553	Fatigue and Fracture	
MSE 5583 or MAE 5583	Corrosion Engineering	
MSE 5693 or MAE 5693	Phase Transformations in Materials	
MSE 5683 or MAE 5683	Thermodynamics and Thermostatistics of Materials	
MAE 5543	Modern Materials	
ECEN 5843	Microelectronic Fabrication	
ECEN 6843	Advanced Microelectronic Fabrication	

The following related MS&E graduate courses currently offered in various departments at OSU are also available to satisfy degree requirements. MSE program approval will be required for registration

<i>Chemistry</i>		
CHEM 5223	Polymer Chemistry	
CHEM 5263	Foundations of Inorganic Chemistry	
CHEM 5283	Solid State Chemistry	
CHEM 6113	Analytical Spectroscopy	
CHEM 5623	Quantum Chemistry I	
CHEM 5963	Advanced Inorganic Chemistry	
<i>Physics</i>		
PHYS 5613	Quantum Mechanics I	
PHYS 5663	Solid State Physics I	
PHYS 5713	Solid State Physics II	
PHYS 5960	Problems in Chemical Physics	
PHYS 6243	Semiconductors I	
PHYS 6313	Quantum Mechanics II	
<i>Biological/ Health Science</i>		
BIOM 6175	Molecular And Cellular Biology	
<i>Chemical Engineering</i>		
CHE 5283	Advanced Bioprocess Engineering	
CHE 5293	Advanced Biomedical Engineering	
<i>Electrical and Computer Engineering</i>		
ECEN 6843	Advanced Microelectronic Fabrication	
ECEN 6840	Photonics III: Microscopy I	
ECEN 6850	Photonics III: Microscopy II	
ECEN 6860	Photonics III: Microscopy III and Image Processing	
ECEN 6890	Photonics IV: Semiconductor Synthesis and Devices III	
<i>Mechanical and Aerospace Engineering</i>		
MAE 5143	Tribology	
MAE 5243	Micro Flows	
MAE 5573	Continuum Mechanics	
MAE 5633	Advanced Thermal Energy Systems Analysis	
MAE 5993	Microstructural Mechanics	
MAE 6133	Surface Mechanics	
Independent Study		
2 hours required		2
Hours Subtotal		20
Total Hours		35

¹ With departmental approval, these courses may be substituted for a required MSE course.

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Mathematics, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 33

Code	Title	Hours
Core Courses		
Choose one of the following tracks:		18
<i>Applied Track</i>		
Select one of the following two courses:		
MATH 5023	Advanced Linear Algebra	
MATH 5043	Advanced Calculus I	
Select one of the following two courses:		
MATH 5543	Numerical Analysis for Differential Equations	
or MATH 5553	Numerical Analysis for Linear Algebra	
MATH 5553	Numerical Analysis for Linear Algebra	
Select four of the following courses:		
MATH 4233	Intermediate Differential Equations	
MATH 4513	Numerical Analysis	
MATH 4553	Introduction to Optimization	
MATH 5213	Fourier Analysis and Wavelets	
MATH 5233	Partial Differential Equations	
MATH 5243	Ordinary Differential Equations	
MATH 5253	Advanced Ordinary Differential Equations	
MATH 5543	Numerical Analysis for Differential Equations	
MATH 5553	Numerical Analysis for Linear Algebra	
MATH 5563	Finite Element Methods for Partial Differential Equations	
MATH 5580	Case Studies in Applied Mathematics	
MATH 5593	Methods of Applied Mathematics	
<i>Pure Track</i>		
Option 1		
Required:		
MATH 5043	Advanced Calculus I	
MATH 5053	Advanced Calculus II	
MATH 5003	Abstract Algebra I	
MATH 5013	Abstract Algebra II	
MATH 5303	General Topology	
MATH 4283	Complex Variables	
Option 2		
Required:		
MATH 5043	Advanced Calculus I	
MATH 5053	Advanced Calculus II	
MATH 5003	Abstract Algebra I	
MATH 5013	Abstract Algebra II	
Select two of the following courses:		
MATH 5143	Real Analysis I	

MATH 5153	Real Analysis II
MATH 5283	Complex Analysis I
MATH 5293	Complex Analysis II
MATH 5313	Geometric Topology
MATH 6323	Algebraic Topology I
MATH 5613	Algebra I
MATH 5623	Algebra II

Math Education Track

Required:	
MATH 5043	Advanced Calculus I
MATH 5913	Introduction to Research in Mathematics Education

Select one of the following courses:

MATH 4713	Number Theory
MATH 4753	Introduction to Cryptography
MATH 5003	Abstract Algebra I
MATH 5013	Abstract Algebra II
MATH 5023	Advanced Linear Algebra

Select three of the following (with exactly two in one area):

<i>Discrete Math</i>	
MATH 4513	Numerical Analysis
MATH 4553	Introduction to Optimization
MATH 4663	Combinatorics
MATH 5543	Numerical Analysis for Differential Equations
MATH 5553	Numerical Analysis for Linear Algebra
CS 4793	Artificial Intelligence I

Geometry

MATH 4423	Geometry and Algorithms in Three-Dimensional Modeling
MATH 4813	Groups and Representations
CS 4143	Computer Graphics

Statistics

STAT 4043	Applied Regression Analysis
STAT 5123	Probability Theory
STAT 5223	Statistical Inference
STAT 5013	Statistics for Experimenters I
STAT 5023	Statistics for Experimenters II
STAT 5043	Sample Survey Designs
STAT 5063	Statistical Machine Learning with R
STAT 5303	Experimental Designs

Hours Subtotal **18**

Additional Graduate Courses

<i>Electives</i>	
Select 9 hours of electives (no more than 6 hours can be outside MATH, STAT or CS).	9

Thesis/Report

MATH 5000	Master's Research and Thesis (3-6 hours in combination with electives)	6
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Hours Subtotal **15**

Total Hours **33**

Non-Thesis Option

Total Hours: 33

Code	Title	Hours
Core Courses		
Choose one of the following tracks:		18
<i>Applied Track</i>		
Select one of the following two courses:		
MATH 5023	Advanced Linear Algebra	
MATH 5043	Advanced Calculus I	
Select one of the following two courses:		
MATH 5543	Numerical Analysis for Differential Equations	
or MATH 5553	Numerical Analysis for Linear Algebra	
MATH 5553	Numerical Analysis for Linear Algebra	
Select four of the following courses:		
MATH 4233	Intermediate Differential Equations	
MATH 4513	Numerical Analysis	
MATH 4553	Introduction to Optimization	
MATH 5213	Fourier Analysis and Wavelets	
MATH 5233	Partial Differential Equations	
MATH 5243	Ordinary Differential Equations	
MATH 5253	Advanced Ordinary Differential Equations	
MATH 5543	Numerical Analysis for Differential Equations	
MATH 5553	Numerical Analysis for Linear Algebra	
MATH 5563	Finite Element Methods for Partial Differential Equations	
MATH 5580	Case Studies in Applied Mathematics	
MATH 5593	Methods of Applied Mathematics	
<i>Pure Track</i>		
Option 1		
Required:		
MATH 5043	Advanced Calculus I	
MATH 5053	Advanced Calculus II	
MATH 5003	Abstract Algebra I	
MATH 5013	Abstract Algebra II	
MATH 5303	General Topology	
MATH 4283	Complex Variables	
Option 2		
Required:		
MATH 5043	Advanced Calculus I	
MATH 5053	Advanced Calculus II	
MATH 5003	Abstract Algebra I	
MATH 5013	Abstract Algebra II	
Select two of the following courses:		
MATH 5143	Real Analysis I	
MATH 5153	Real Analysis II	
MATH 5283	Complex Analysis I	
MATH 5293	Complex Analysis II	
MATH 5313	Geometric Topology	
MATH 6323	Algebraic Topology I	
MATH 5613	Algebra I	

MATH 5623	Algebra II	
<i>Math Education Track</i>		
Required:		
MATH 5043	Advanced Calculus I	
MATH 5913	Introduction to Research in Mathematics Education	
Select one of the following courses:		
MATH 4713	Number Theory	
MATH 4753	Introduction to Cryptography	
MATH 5003	Abstract Algebra I	
MATH 5013	Abstract Algebra II	
MATH 5023	Advanced Linear Algebra	
Select three of the following (with exactly two in one area):		
<i>Discrete Math</i>		
MATH 4513	Numerical Analysis	
MATH 4553	Introduction to Optimization	
MATH 4663	Combinatorics	
MATH 5543	Numerical Analysis for Differential Equations	
MATH 5553	Numerical Analysis for Linear Algebra	
CS 4793	Artificial Intelligence I	
<i>Geometry</i>		
MATH 4423	Geometry and Algorithms in Three-Dimensional Modeling	
MATH 4813	Groups and Representations	
CS 4143	Computer Graphics	
<i>Statistics</i>		
STAT 4043	Applied Regression Analysis	
STAT 5123	Probability Theory	
STAT 5223	Statistical Inference	
STAT 5013	Statistics for Experimenters I	
STAT 5023	Statistics for Experimenters II	
STAT 5043	Sample Survey Designs	
STAT 5063	Statistical Machine Learning with R	
STAT 5303	Experimental Designs	
Hours Subtotal		18
Additional Graduate Courses		
<i>Electives</i>		
Select 9 hours of electives (no more than 6 hours can be outside MATH, STAT or CS).		9
<i>Thesis/Report</i>		
MATH 5000	Master's Research and Thesis (3-6 hours in combination with electives)	6
Hours Subtotal		15
Total Hours		33

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Mechanical and Aerospace Engineering, MEN

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 33

Code	Title	Hours
Required Core		
Select 21 credit hours of MAE courses (5000- and 6000-level) that are approved for graduate credit.		21
Technical Electives		
Select 9 hours of graduate-level courses in BAE/CIVE/CHE/ECEN/IEM/MAE/MATH/MSE/PETE with the approval of the student's Graduate Advisory Committee and the MAE Graduate Coordinator. ¹		9
Capstone		
The Capstone requirement will be satisfied by enrollment in MAE 5010 and will require a term project or creative requirement.		
MAE 5010	Mechanical and Aerospace Engineering Projects	3
Total Hours		33

¹ Graduate courses from other disciplines may be allowed but will require approval of the student's Graduate Advisory Committee and the MAE Graduate Coordinator prior to enrollment.

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Mechanical and Aerospace Engineering, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 30

Code	Title	Hours
Required Courses		
Select 18 hours of MAE Graduate-Level Courses		18
Hours Subtotal		18
Technical Elective		
Select 6 hours		6
Hours Subtotal		6
Research Hours		
MAE 5000	Master's Thesis	6
Hours Subtotal		6
Total Hours		30

Creative Component Option

Total Hours: 35

Code	Title	Hours
Required Courses		
Select 18 hours of MAE Graduate-Level Courses		18
Hours Subtotal		18
Technical Elective		
Select 9 hours		9
Hours Subtotal		9
Research Hours		
MAE 5010	Mechanical and Aerospace Engineering Projects	2
Hours Subtotal		2
Other Electives		
Select 6 hours of graduate-level MAE courses		6
Hours Subtotal		6
Total Hours		35

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Mechanical and Aerospace Engineering: Unmanned Aerial Systems, MS

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 30

Code	Title	Hours
<i>Unmanned Aerial Systems Core:</i>		
Select 12 hours from the following:		12
MAE 5083	Engineering Acoustics	
MAE 5233	Advanced Fluid Dynamics I	
MAE 5343	Advanced Aero Propulsion and Power	
MAE 5913	Advanced Aerodynamics	
MAE 5923	Guidance and Control of Aerospace Vehicles	
MAE 5943	Unsteady Aerodynamics and Aeroacoustics	
MAE 5963	Unmanned Aerial Systems Design and Analysis	
MAE 5973	Unmanned Aerial Systems Propulsion	
MAE 5983	Aircraft Certification and Test	
MAE 6313	Atmospheric Flight Control	
<i>Mechanical and Aerospace Engineering Electives:</i>		
Any MAE graduate-level course supporting UAS thesis research will be allowed with permission of the student's faculty advisory committee.		6
<i>Technical Electives:</i>		
Any graduate-level course will be allowed with permission of the student's faculty advisory committee.		6
MAE 5000	Master's Thesis	6
Total Hours		30

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Microbiology, Cell and Molecular Biology, MS

regulations for minimal GPA, language proficiency and other general requirements.

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 30

Code	Title	Hours
Required Courses		
MICR 5160	Seminar	1
MICR 6120	Recent Advances in Microbiology	2
Hours Subtotal		3
Electives		
Select 21 hours from the following:		21
Non-zero ending MICR courses at the 5000-level		
Non-zero ending BIOC courses at the 5000-level or above		
Hours Subtotal		21
Thesis		
MICR 5000	Thesis	6
Hours Subtotal		6
Total Hours		30

Non-Thesis Option

Total Hours: 32

Code	Title	Hours
Required Courses		
MICR 5160	Seminar	1
MICR 5163	Foundations of Cellular Life	3
MICR 5990	Special Problems	6
MICR 6120	Recent Advances in Microbiology	2
Hours Subtotal		12
Electives		
Select 18 hours from the following:		18
MICR 6153	Molecular Microbial Genetics	
BIOL 5524	Biological Laboratory Instrumentation	
Non-zero ending MICR courses at the 5000-level		
Non-zero ending BIOC courses at the 5000-level or above		
Hours Subtotal		18
Additional Requirements		
MICR 5000	Thesis	2
Hours Subtotal		2
Total Hours		32

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic

Music: Applied Music, MM

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 32

Code	Title	Hours
Required Courses		
<i>Courses in Pedagogy</i>		
MUSI 5890	Special Studies in Music Pedagogy	2
MUSI 5733	Techniques of Pedagogy and Performance	3
MUSI 5842	Music Repertory	2
<i>Courses in Performance</i>		
MUSI 5002	Final Degree Performance	2
MUSI 5490	Lessons in Applied Music (Major Field)	8
Hours Subtotal		17
Additional Requirements		
MUSI 5012	Final Degree Project and Oral Examination	2
MUSI 5113	Introduction to Graduate Studies in Music	3
MUSI 5750	Seminar in Music History	3
MUSI 5962	Analytical Techniques in Music I	2
MUSI 5972	Analytical Techniques in Music II	2
Hours Subtotal		12
Electives		
All Students in the Applied Music Track will complete 3 hours in Elective Courses in Music. Other courses may be counted as elective credits with the approval of the Graduate Coordinator.		3
MUSI 5480	Lessons in Applied Music (Minor Field)	
MUSI 5600	Chamber Ensembles	
MUSI 5610	University Bands	
MUSI 5620	Symphony Orchestra	
MUSI 5630	University Choral Ensembles	
Hours Subtotal		3
Total Hours		32

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Music: Conducting, MM

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 32

Code	Title	Hours
Required Courses		
<i>Courses in Pedagogy</i>		
MUSI 5512	Advanced Studies in Music Literature and Pedagogy I	2
MUSI 5522	Advanced Studies in Music Literature and Pedagogy II	2
MUSI 5733	Techniques of Pedagogy and Performance	3
<i>Courses in Performance</i>		
MUSI 5002	Final Degree Performance	2
MUSI 5712	Advanced Studies in Conducting I	2
MUSI 5722	Advanced Studies in Conducting II	2
MUSI 5742	Conducting Practicum	2
Hours Subtotal		15
Additional Requirements		
MUSI 5012	Final Degree Project and Oral Examination	2
MUSI 5113	Introduction to Graduate Studies in Music	3
MUSI 5750	Seminar in Music History	3
MUSI 5962	Analytical Techniques in Music I	2
MUSI 5972	Analytical Techniques in Music II	2
Hours Subtotal		12
Electives		
All students in the Applied Music Track will complete 3 hours in Elective Courses in Music. Other courses may be counted as elective credits with the approval of the Graduate Coordinator. ¹		5
MUSI 5480	Lessons in Applied Music (Minor Field)	
MUSI 5600	Chamber Ensembles	
MUSI 5610	University Bands	
MUSI 5620	Symphony Orchestra	
MUSI 5630	University Choral Ensembles	
Hours Subtotal		5
Total Hours		32

¹ Admission to all ensembles is by audition.

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Natural Resource Ecology and Management, MS

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 30

Code	Title	Hours
Core Courses		
Select a minimum of 23 hours of approved graduate-level coursework ¹		23
Hours Subtotal		23
Additional Requirements		
NREM 5020	Graduate Seminar	1
NREM 5000	Master's Thesis Report	6
Hours Subtotal		7
Total Hours		30

¹ Total hours for thesis option could reach maximum of 36 depending on the courses selected.

Non-Thesis Option

Total Hours: 32

Code	Title	Hours
Core Courses		
Select a minimum of 29 hours of approved graduate-level coursework		29
Hours Subtotal		29
Additional Requirements		
NREM 5020	Graduate Seminar	1
NREM 5000	Master's Thesis Report	2
Hours Subtotal		3
Total Hours		32

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Natural Resource Ecology and Management: Fisheries and Aquatic Ecology, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 30

Code	Title	Hours
Core Courses		
Select a minimum of 23 hours of approved graduate-level coursework ¹		23
Hours Subtotal		23
Additional Requirements		
NREM 5020	Graduate Seminar	1
NREM 5000	Master's Thesis Report	6
Hours Subtotal		7
Total Hours		30

¹ Total hours for thesis option could reach maximum of 36 depending on courses selected.

Non-Thesis Option

Total Hours: 32

Code	Title	Hours
Core Courses		
Select a minimum of 29 hours of approved graduate-level coursework		29
Hours Subtotal		29
Additional Requirements		
NREM 5020	Graduate Seminar	1
NREM 5000	Master's Thesis Report	2
Hours Subtotal		3
Total Hours		32

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Natural Resource Ecology and Management: Forest Resources, MS

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 30

Code	Title	Hours
Core Courses		
Select a minimum of 23 hours of approved graduate-level coursework ¹		23
Hours Subtotal		23
Additional Requirements		
NREM 5020	Graduate Seminar	1
NREM 5000	Master's Thesis Report	6
Hours Subtotal		7
Total Hours		30

¹ Total hours for thesis option could reach maximum of 36 depending on courses selected.

Non-Thesis Option

Total Hours: 32

Code	Title	Hours
Core Courses		
Select a minimum of 29 hours of approved graduate-level coursework		29
Hours Subtotal		29
Additional Requirements		
NREM 5020	Graduate Seminar	1
NREM 5000	Master's Thesis Report	2
Hours Subtotal		3
Total Hours		32

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Natural Resource Ecology and Management: Rangeland Ecology and Management, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 30

Code	Title	Hours
Core Courses		
Select a minimum of 23 hours of approved graduate-level coursework ¹		23
Hours Subtotal		23
Additional Requirements		
NREM 5020	Graduate Seminar	1
NREM 5000	Master's Thesis Report	6
Hours Subtotal		7
Total Hours		30

¹ Total hours for thesis option could reach maximum of 36 depending on courses selected.

Non-Thesis Option

Total Hours: 32

Code	Title	Hours
Core Courses		
Select a minimum of 29 hours of approved graduate-level coursework		29
Hours Subtotal		29
Additional Requirements		
NREM 5020	Graduate Seminar	1
NREM 5000	Master's Thesis Report	2
Hours Subtotal		3
Total Hours		32

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Natural Resource Ecology and Management: Wildlife Ecology and Management, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 30

Code	Title	Hours
Core Courses		
Select a minimum of 23 hours of approved graduate-level coursework ¹		23
Hours Subtotal		23
Additional Requirements		
NREM 5020	Graduate Seminar	1
NREM 5000	Master's Thesis Report	6
Hours Subtotal		7
Total Hours		30

¹ Total hours for thesis option could reach maximum of 36 depending on courses selected.

Non-Thesis Option

Total Hours: 32

Code	Title	Hours
Core Courses		
Select a minimum of 29 hours of approved graduate-level coursework		29
Hours Subtotal		29
Additional Requirements		
NREM 5020	Graduate Seminar	1
NREM 5000	Master's Thesis Report	2
Hours Subtotal		3
Total Hours		32

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Nutritional Sciences: Dietetics (Internet-Based Program), MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 36

Code	Title	Hours
Program Core:		
STAT 5013	Statistics for Experimenters I	3
NSCI 5123	Research Methods in Nutritional Sciences	3
NSCI 5963	Environmental Scanning and Analysis	3
Hours Subtotal		9
OSU Nutritional Sciences Core Credits and Non-Thesis Creative Component		
NSCI 5033	Macronutrients in Human Nutrition	3
NSCI 5043	Micronutrients in Human Nutrition	3
NSCI 5843	Non-thesis Graduate Capstone	3
Hours Subtotal		9
Electives		
Select 18 hours from the following:		18
NSCI 5013	Financial Management and Cost Controls in Dietetics	
NSCI 5053	Functional Foods for Chronic Disease Prevention	
NSCI 5103	Grant Writing for the Professional	
NSCI 5133	Advanced Nutrition for Exercise and Sport	
NSCI 5203	Nutrition in Wellness	
NSCI 5213	Entrepreneurship in Food Service and Dietetics	
NSCI 5223	Advanced Nutrition Across the Life Span	
NSCI 5240	Contemporary Issues in Nutrition	
NSCI 5313	Dietary and Herbal Supplements	
NSCI 5323	Nutrition and Physical Activity in Aging	
NSCI 5363	Maternal and Child Nutrition	
NSCI 5373	Childhood Nutrition	
NSCI 5443	Nutrigenomics and Nutrigenetics	
NSCI 5543	Obesity Prevention Across the Lifespan	
NSCI 5553	Global Nutrition and Food Security	
NSCI 5613	Advanced Nutrition Education and Counseling	
NSCI 5643	Advanced Medical Nutrition Therapy	
NSCI 5683	Fundamentals of Leadership in Dietetics	
NSCI 5713	Advanced Community Nutrition	
NSCI 5753	Health Care Administration	
NSCI 5913	Nutritional Epidemiology	
NSCI 6033	Phytochemicals	
NSCI 6223	Nutrition in Immunology	
NSCI 6243	Nutrition and Cancer	
NSCI 6643	Clinical Aspects of Nutrition Support	

Hours Subtotal	18
Total Hours	36

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Nutritional Sciences: Dietetics Research, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Hours

Total Hours: 36

Code	Title	Hours
Degree Core		
NSCI 5000	Master's Thesis	6
NSCI 5033	Macronutrients in Human Nutrition	3
NSCI 5043	Micronutrients in Human Nutrition	3
NSCI 5123	Research Methods in Nutritional Sciences	3
NSCI 5412	Dietetic Internship Management Practicum	2
NSCI 5422	Dietetic Internship Clinical Practicum	2
NSCI 5432	Dietetic Internship Community Nutrition Practicum	2
NSCI 5643	Advanced Medical Nutrition Therapy	3
NSCI 5960	Master's Seminar in Nutritional Sciences	1
STAT 5013	Statistics for Experimenters I	3
or REMS 5953	Statistical Methods in Education	
Hours Subtotal		28
Electives		
Select 8 hours from the following:		8
NSCI 5023	Advanced Nutrition in the Pathophysiology of Chronic Disease	
NSCI 5133	Advanced Nutrition for Exercise and Sport	
NSCI 5363	Maternal and Child Nutrition	
NSCI 5313	Dietary and Herbal Supplements	
NSCI 5443	Nutrigenomics and Nutrigenetics	
NSCI 5543	Obesity Prevention Across the Lifespan	
NSCI 5553	Global Nutrition and Food Security	
NSCI 5563	Nutritional Assessment	
NSCI 5613	Advanced Nutrition Education and Counseling	
NSCI 5713	Advanced Community Nutrition	
NSCI 5743	Advanced Laboratory Techniques in Nutritional Sciences	
NSCI 5870	Problems in Nutritional Science	
NSCI 5913	Nutritional Epidemiology	
NSCI 6033	Phytochemicals	
BIOC 5753	Biochemical Principles	
BIOC 6723	Signal Transduction	
BIOC 5102	Molecular Genetics	
BIOC 5112	Articulation of Research Logic	
BIOC 5824	Biochemical Laboratory Methods	
BIOL 5215	Mammalian Physiology	
BIOL 5283	Endocrinology	
CPSY 5173	Gerontological Counseling	
CPSY 5473	Basic Counseling Skills	

CPSY 5503	Multicultural Counseling
GENE 5102	Molecular Genetics
HCA 5043	Organizational Leadership and Development in Health Care
HCA 5103	Introduction to Global Health
HHP 5853	Clin Ex Test & Prescript
HHP 5873	Human Bioenergetics
HLTH 5113	Psychological Aspects of Health
HLTH 5323	General Epidemiology
HLTH 5683	Health Behavior Theory and Practice for Public Health
HLTH 5973	Designing Public Health Programs
HLTH 5983	Implementation and Evaluation of Public Health Programs
ITOX 5203	Bioinformatics
MPH 5323	General Epidemiology
MPH 5413	Food Safety and Public Health
MPH 5453	Cultural Issues in Health
MPH 5683	Health Behavior Theory and Practice for Public Health
MPH 5973	Designing Public Health Programs
REMS 6003	Analyses of Variance
SCFD 5913	Introduction to Qualitative Inquiry
STAT 5023	Statistics for Experimenters II
STAT 5043	Sample Survey Designs
STAT 5083	Statistics for Biomedical Researchers
STAT 5303	Experimental Designs

Hours Subtotal 8
Total Hours 36

Non-Thesis Option

Total Hours: 36

Code	Title	Hours
Degree Core		
NSCI 5033	Macronutrients in Human Nutrition	3
NSCI 5043	Micronutrients in Human Nutrition	3
NSCI 5123	Research Methods in Nutritional Sciences	3
NSCI 5412	Dietetic Internship Management Practicum	2
NSCI 5422	Dietetic Internship Clinical Practicum	2
NSCI 5432	Dietetic Internship Community Nutrition Practicum	2
NSCI 5643	Advanced Medical Nutrition Therapy	3
NSCI 5843	Non-thesis Graduate Capstone	3
NSCI 5960	Master's Seminar in Nutritional Sciences	1
STAT 5013	Statistics for Experimenters I	3
or REMS 5953	Statistical Methods in Education	
Hours Subtotal		25
Electives		
Select 11 hours from the following:		11
NSCI 5023	Advanced Nutrition in the Pathophysiology of Chronic Disease	
NSCI 5133	Advanced Nutrition for Exercise and Sport	

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

NSCI 5363	Maternal and Child Nutrition
NSCI 5313	Dietary and Herbal Supplements
NSCI 5443	Nutrigenomics and Nutrigenetics
NSCI 5543	Obesity Prevention Across the Lifespan
NSCI 5553	Global Nutrition and Food Security
NSCI 5563	Nutritional Assessment
NSCI 5613	Advanced Nutrition Education and Counseling
NSCI 5713	Advanced Community Nutrition
NSCI 5743	Advanced Laboratory Techniques in Nutritional Sciences
NSCI 5870	Problems in Nutritional Science
NSCI 5913	Nutritional Epidemiology
NSCI 6033	Phytochemicals
BIOC 5753	Biochemical Principles
BIOC 6723	Signal Transduction
BIOC 5102	Molecular Genetics
BIOC 5112	Articulation of Research Logic
BIOC 5824	Biochemical Laboratory Methods
BIOL 5215	Mammalian Physiology
BIOL 5283	Endocrinology
CPSY 5173	Gerontological Counseling
CPSY 5473	Basic Counseling Skills
CPSY 5503	Multicultural Counseling
GENE 5102	Molecular Genetics
HCA 5043	Organizational Leadership and Development in Health Care
HCA 5103	Introduction to Global Health
HHP 5853	Clin Ex Test & Prescript
HHP 5873	Human Bioenergetics
HLTH 5113	Psychological Aspects of Health
HLTH 5323	General Epidemiology
HLTH 5683	Health Behavior Theory and Practice for Public Health
HLTH 5973	Designing Public Health Programs
HLTH 5983	Implementation and Evaluation of Public Health Programs
ITOX 5203	Bioinformatics
MPH 5323	General Epidemiology
MPH 5413	Food Safety and Public Health
MPH 5453	Cultural Issues in Health
MPH 5683	Health Behavior Theory and Practice for Public Health
MPH 5973	Designing Public Health Programs
REMS 6003	Analyses of Variance
SCFD 5913	Introduction to Qualitative Inquiry
STAT 5023	Statistics for Experimenters II
STAT 5043	Sample Survey Designs
STAT 5083	Statistics for Biomedical Researchers
STAT 5303	Experimental Designs
Hours Subtotal	11
Total Hours	36

Nutritional Sciences: Nutrition, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 30

Code	Title	Hours
Core Requirements		
NSCI 5000	Master's Thesis	6
NSCI 5123	Research Methods in Nutritional Sciences	3
NSCI 5033	Macronutrients in Human Nutrition	3
NSCI 5043	Micronutrients in Human Nutrition	3
NSCI 5960	Master's Seminar in Nutritional Sciences	1
STAT 5013	Statistics for Experimenters I	3
Hours Subtotal		19
Electives		
Select 10 hours of the following:		10
NSCI 5023	Advanced Nutrition in the Pathophysiology of Chronic Disease	
NSCI 5133	Advanced Nutrition for Exercise and Sport	
NSCI 5363	Maternal and Child Nutrition	
NSCI 5313	Dietary and Herbal Supplements	
NSCI 5443	Nutrigenomics and Nutrigenetics	
NSCI 5543	Obesity Prevention Across the Lifespan	
NSCI 5553	Global Nutrition and Food Security	
NSCI 5563	Nutritional Assessment	
NSCI 5613	Advanced Nutrition Education and Counseling	
NSCI 5643	Advanced Medical Nutrition Therapy	
NSCI 5713	Advanced Community Nutrition	
NSCI 5743	Advanced Laboratory Techniques in Nutritional Sciences	
NSCI 5870	Problems in Nutritional Science	
NSCI 5913	Nutritional Epidemiology	
NSCI 6033	Phytochemicals	
BIOC 5753	Biochemical Principles	
BIOC 6723	Signal Transduction	
BIOC 5102	Molecular Genetics	
BIOC 5112	Articulation of Research Logic	
BIOC 5824	Biochemical Laboratory Methods	
BIOL 5215	Mammalian Physiology	
BIOL 5283	Endocrinology	
CPSY 5173	Gerontological Counseling	
CPSY 5473	Basic Counseling Skills	
CPSY 5503	Multicultural Counseling	
HCA 5043	Organizational Leadership and Development in Health Care	
HCA 5103	Introduction to Global Health	
HHP 5593	Human Electrocardiographic Interpretation	
HHP 5613	Cardiac Rehabilitation	
HHP 5853	Clin Ex Test & Prescript	

HHP 5873	Human Bioenergetics	
HLTH 5113	Psychological Aspects of Health	
HLTH 5323	General Epidemiology	
HLTH 5453	Cultural Issues In Health	
HLTH 5683	Health Behavior Theory and Practice for Public Health	
HLTH 5973	Designing Public Health Programs	
HLTH 5983	Implementation and Evaluation of Public Health Programs	
REMS 6003	Analyses of Variance	
SCFD 5913	Introduction to Qualitative Inquiry	
STAT 5023	Statistics for Experimenters II	
STAT 5043	Sample Survey Designs	
STAT 5083	Statistics for Biomedical Researchers	
STAT 5303	Experimental Designs	
VBSC 6120	Advanced Physiology of Selected Systems	
Hours Subtotal		10
Other Requirements		
Professional Seminar		1
Hours Subtotal		1
Total Hours		30

Non-Thesis Option

Total Hours: 34

Code	Title	Hours
Core Requirements		
NSCI 5843	Non-thesis Graduate Capstone	3
NSCI 5123	Research Methods in Nutritional Sciences	3
NSCI 5033	Macronutrients in Human Nutrition	3
NSCI 5043	Micronutrients in Human Nutrition	3
NSCI 5960	Master's Seminar in Nutritional Sciences	1
STAT 5013	Statistics for Experimenters I	3
Hours Subtotal		16
Electives		
Select 17 hours of the following:		17
NSCI 5023	Advanced Nutrition in the Pathophysiology of Chronic Disease	
NSCI 5133	Advanced Nutrition for Exercise and Sport	
NSCI 5363	Maternal and Child Nutrition	
NSCI 5313	Dietary and Herbal Supplements	
NSCI 5443	Nutrigenomics and Nutrigenetics	
NSCI 5543	Obesity Prevention Across the Lifespan	
NSCI 5553	Global Nutrition and Food Security	
NSCI 5563	Nutritional Assessment	
NSCI 5613	Advanced Nutrition Education and Counseling	
NSCI 5643	Advanced Medical Nutrition Therapy	
NSCI 5713	Advanced Community Nutrition	
NSCI 5743	Advanced Laboratory Techniques in Nutritional Sciences	
NSCI 5870	Problems in Nutritional Science	
NSCI 5913	Nutritional Epidemiology	

NSCI 6033	Phytochemicals	
BIOC 5753	Biochemical Principles	
BIOC 6723	Signal Transduction	
BIOC 5102	Molecular Genetics	
BIOC 5112	Articulation of Research Logic	
BIOC 5824	Biochemical Laboratory Methods	
BIOL 5215	Mammalian Physiology	
BIOL 5283	Endocrinology	
CPSY 5173	Gerontological Counseling	
CPSY 5473	Basic Counseling Skills	
CPSY 5503	Multicultural Counseling	
HCA 5043	Organizational Leadership and Development in Health Care	
HCA 5103	Introduction to Global Health	
HHP 5593	Human Electrocardiographic Interpretation	
HHP 5613	Cardiac Rehabilitation	
HHP 5853	Clin Ex Test & Prescript	
HHP 5873	Human Bioenergetics	
HLTH 5113	Psychological Aspects of Health	
HLTH 5323	General Epidemiology	
HLTH 5453	Cultural Issues In Health	
HLTH 5683	Health Behavior Theory and Practice for Public Health	
HLTH 5973	Designing Public Health Programs	
HLTH 5983	Implementation and Evaluation of Public Health Programs	
REMS 6003	Analyses of Variance	
SCFD 5913	Introduction to Qualitative Inquiry	
STAT 5023	Statistics for Experimenters II	
STAT 5043	Sample Survey Designs	
STAT 5083	Statistics for Biomedical Researchers	
STAT 5303	Experimental Designs	
VBSC 6120	Advanced Physiology of Selected Systems	
Hours Subtotal		17
Other Requirements		
Professional Seminar		1
Hours Subtotal		1
Total Hours		34

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Petroleum Engineering, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 30

Code	Title	Hours
Core Courses		
PETE 5313	Advanced Drilling Modeling and Simulation	3
PETE 5333	Advanced Production and Flow Assurance	3
PETE 5373	Advanced Well Stimulation	3
Hours Subtotal		9
Thesis		
PETE 5000	Master's Thesis	6
Hours Subtotal		6
Electives		
Graduate-approved elective (PETE or other) courses, selected by the student with approval of the student's advisor.		15
<i>Suggested Elective Courses</i>		
<i>Petroleum Engineering (PETE) Courses</i>		
PETE 5303	Petroleum Geomechanics	
PETE 5343	Advanced Reservoir Engineering	
PETE 5363	Petroleum Economics and Investments	
PETE 5413	Advanced Well Design and Operational Analysis	
PETE 5513	Directional Drilling	
PETE 5613	Advanced Well Completions	
<i>Mathematics (MATH) and Statistics (STAT) Courses</i>		
5000-level advanced mathematics courses as approved by advisor		
5000-level advanced statistics courses as approved by advisor		
<i>Other courses</i>		
Any 4000-level course in PETE, MATH and STAT must be pre-approved by advisor as part of the plan of study.		
Hours Subtotal		15
Total Hours		30

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Philosophy, MA

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 30

Code	Title	Hours
Required Courses		
Select 24 hours of approved courses.		24
Hours Subtotal		24
Research		
Select 6 hours of approved research courses.		6
Hours Subtotal		6
Total Hours		30

Formal Report Option

Total Hours: 32

Code	Title	Hours
Required Courses		
Select 30 hours of approved courses.		30
Hours Subtotal		30
Report		
Select 2 hours of approved report.		2
Hours Subtotal		2
Total Hours		32

Creative Component Option

Total Hours: 32

Code	Title	Hours
Required Courses		
Select 30 hours of approved courses.		30
Hours Subtotal		30
Creative Component		
Select 2 hours of approved coursework.		2
Hours Subtotal		2
Total Hours		32

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Physician Assistant Studies, MS

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

For more information on requirements, please visit <https://medicine.okstate.edu/pa/prospective-students.html>.

Total Hours: 124

Code	Title	Hours
Core Curriculum		
PA 5011	Introduction to Pharmacology	1
PA 5021	Fundamentals of Medical Imaging	1
PA 5031	Introduction to Microbiology and Immunology	1
PA 5041	Laboratory Medicine	1
PA 5015	Human Anatomy	5
PA 5104	Medical Science Foundations	4
PA 5112	Developing the Physician Assistant I	2
PA 5121	Rural Health	1
PA 5123	Applied Clinical Medicine I	3
PA 5223	Gastrointestinal System	3
PA 5153	Nervous System	3
PA 5233	Psychiatry System	3
PA 5213	Applied Clinical Medicine II	3
PA 5222	Developing the Physician Assistant II	2
PA 5124	Cardiovascular System	4
PA 5113	Respiratory System	3
PA 5133	Hematology System	3
PA 5143	Genitourinary System	3
PA 5234	Applied Clinical Medicine III	4
PA 5242	Developing the Physician Assistant III	2
PA 5243	Endocrine System	3
PA 5263	Musculoskeletal/Integumentary System	3
PA 5253	Reproductive System	3
PA 5301	Research Methods for Evidence-Based Medicine	1
PA 5302	Developing the Physician Assistant IV	2
PA 5404	Family Medicine I	4
PA 5414	Family Medicine II	4
PA 5424	Internal Medicine I	4
PA 5434	Internal Medicine II	4
PA 5444	Emergency Medicine I	4
PA 5454	Emergency Medicine II	4
PA 5464	Obstetrics & Gynecology	4
PA 5474	Pediatrics	4
PA 5484	Psychiatry	4
PA 5494	General Surgery	4
PA 5504	Medicine Elective I	4
PA 5514	Medicine Elective II	4
PA 5524	Medicine Elective III	4
or PA 5534	Surgery Elective	
PA 5544	Medicine Selective	4

Physics, MS

regulations for minimal GPA, language proficiency and other general requirements.

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 30

Code	Title	Hours
Required Courses		
PHYS 5113	Statistical Thermodynamics and Kinetic Theory	3
PHYS 5313	Electromagnetic Theory	3
PHYS 5413	Classical Mechanics	3
PHYS 5453	Methods of Theoretical Physics	3
PHYS 5613	Quantum Mechanics I	3
Hours Subtotal		15
Electives		
Select 9 hours from PHYS, MATH or an allied field in consultation with student's advisor.		9
Hours Subtotal		9
Thesis		
PHYS 5000	Master's Thesis Research or Report	6
Hours Subtotal		6
Total Hours		30

Report Option

Total Hours: 32

Code	Title	Hours
Required Courses		
PHYS 5113	Statistical Thermodynamics and Kinetic Theory	3
PHYS 5313	Electromagnetic Theory	3
PHYS 5413	Classical Mechanics	3
PHYS 5453	Methods of Theoretical Physics	3
PHYS 5613	Quantum Mechanics I	3
Hours Subtotal		15
Electives		
Select 15 hours from PHYS or a related field in consultation with student's advisor.		15
Hours Subtotal		15
Non-Thesis		
PHYS 5000	Master's Thesis Research or Report (Report)	2
Hours Subtotal		2
Total Hours		32

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic

Physics: Optics and Photonics, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 30

Code	Title	Hours
Required Courses		
PHYS 5453	Methods of Theoretical Physics	3
PHYS 5613	Quantum Mechanics I	3
Select 9 hours of Photonics core courses from the following with advisor approval:		9
PHYS 5123	Geometrical Optics	
PHYS 5163	Lasers	
PHYS 5303	Physical Optics	
ECEN 4843	Design of Lasers and Systems	
ECEN 5833	Fiber-Optic Communication Systems	
Hours Subtotal		15
Electives		
Select 9 hours from the two groups of electives with a minim of one course and a maximum of two from Group I. Courses at the graduate level from other departments may be substituted for electives in Group II with Physics Department permission, but alternate courses must have a strong connection to optics and photonics.		9
<i>Group I</i>		
PHYS 4813	Electromagnetic Radiation	
PHYS 5313	Electromagnetic Theory	
PHYS 6713	Advanced Electromagnetic Radiation	
ECEN 5613	Electromagnetic Theory	
<i>Group II</i>		
PHYS 5133	Laser Spectroscopy	
PHYS 5663	Solid State Physics I	
PHYS 6313	Quantum Mechanics II	
PHYS 6413	Nonlinear Optics	
PHYS 6423	Quantum Optics	
ECEN 4823	Design of Optical Systems	
ECEN 5843	Microelectronic Fabrication	
ECEN 5853	Ultrafast Optoelectronics	
ECEN 5793	Digital Image Processing	
Hours Subtotal		9
Thesis/Research		
Select 6 hours (or more) of supervised research with submission of an approved thesis.		
PHYS 5000	Master's Thesis Research or Report (Or equivalent)	6
Hours Subtotal		6
Total Hours		30

Non-Thesis Option

Total Hours: 32

Code	Title	Hours
Required Courses		
PHYS 5453	Methods of Theoretical Physics	3
PHYS 5613	Quantum Mechanics I	3
Select 9 hours of Photonics core courses from the following with advisor approval:		9
PHYS 5123	Geometrical Optics	
PHYS 5163	Lasers	
PHYS 5303	Physical Optics	
ECEN 4843	Design of Lasers and Systems	
ECEN 5833	Fiber-Optic Communication Systems	
Hours Subtotal		15
Electives		
Select 9 hours from the two groups of electives with a minim of one course and a maximum of two from Group I. Courses at the graduate level from other departments may be substituted for electives in Group II with Physics Department permission, but alternate courses must have a strong connection to optics and photonics.		9
<i>Group I</i>		
PHYS 4813	Electromagnetic Radiation	
PHYS 5313	Electromagnetic Theory	
PHYS 6713	Advanced Electromagnetic Radiation	
ECEN 5613	Electromagnetic Theory	
<i>Group II</i>		
PHYS 5133	Laser Spectroscopy	
PHYS 5663	Solid State Physics I	
PHYS 6313	Quantum Mechanics II	
PHYS 6413	Nonlinear Optics	
PHYS 6423	Quantum Optics	
ECEN 4823	Design of Optical Systems	
ECEN 5843	Microelectronic Fabrication	
ECEN 5853	Ultrafast Optoelectronics	
ECEN 5793	Digital Image Processing	
Hours Subtotal		9
Additional Electives		
Select 6 hours of advanced courses at the graduate level.		6
Hours Subtotal		6
Report		
Students must complete a two-credit hour report.		2
Hours Subtotal		2
Total Hours		32

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Plant and Soil Sciences, MS

regulations for minimal GPA, language proficiency and other general requirements.

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 30

Code	Title	Hours
Course Requirements		
Select 24 hours from the following:		24
A minimum of 15 hours of 5000-level or higher courses that include:		
PLNT 5020 or SOIL 5020	Graduate Seminar Graduate Seminar	
SOIL 5131	Professional Development Colloquium in Plant and Soil Sciences	
PLNT 5110 or SOIL 5110	Problems and Special Study Problems and Special Study	
9 hours of MATH (including at least 3 hours of STAT in combined BS and MS programs):		
No more than 9 credit hours of 3000- or 4000-level coursework approved for graduate credit.		
Recommended courses at the discretion of the graduate committee that students emphasizing soil science should complete 4 of the 5 courses listed below (or equivalent) during their undergraduate or graduate programs:		
SOIL 5353	Advanced Soil Genesis and Classification	
SOIL 5234	Soil Nutrient Management	
SOIL 5223	Soil Chemical Processes and Impact on Environmental Quality	
SOIL 5683 or SOIL 6583	Soil, Water, and Weather Soil Physics Theory	
SOIL 5383	Advanced Soil Microbiology	
A student may take a maximum of 3 research credit hours. Research hours are to be taken to document student effort in areas not associated with the students thesis. All students must indicate on their Plan of Study whether or not their research will involve human subjects. If human subjects are to be used, approval must be received from the Institutional Research Board (IRB) prior to the beginning of the research.		
PLNT 5230 or SOIL 5230	Research Research	
Hours Subtotal		24
Thesis		
PLNT 5000 or SOIL 5000	Master's Thesis Master's Thesis	6
Hours Subtotal		6
Total Hours		30

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic

Plant Biology, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 30

Code	Title	Hours
Required Courses		
PBIO 5110	Special Topics in Plant Biology (Professional Development)	1
PBIO 5850	Plant Biology Seminar	2
PBIO 5000	Master's Thesis	6
Hours Subtotal		9
Electives		
At least 3 graduate courses totaling 9 credit hours at the 5000 level or higher and remaining hours at 5000 level or higher from BIOC, BIOL, CHEM, CS, ENVR, GENE, GEOG, GEOL, MATH, MICR, PBIO, PHYS, PLNT, NREM, STAT		21
Hours Subtotal		21
Total Hours		30

Additional Plant Biology Requirements

- Minimum of "B" in all courses
- Research Proposal Defense
- Teaching one semester as a Graduate Teaching Assistant

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Political Science, MA

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 33

Code	Title	Hours
Required Courses		
POLS 5013	Quantitative Methods	3
POLS 5103	Research Design	3
POLS 5203	ProSeminar in International Relations	3
POLS 5403	ProSeminar in Comparative Politics	3
POLS 5703	ProSeminar in American Politics	3
POLS 5000	Thesis	6
Hours Subtotal		21
Electives		
Select two advanced topics courses (e.g., POLS 5710, POLS 5210, POLS 5410) or equivalent. Must be in two separate subfields.		6
Any two graduate-level courses.		6
Hours Subtotal		12
Total Hours		33

Creative Component Option

Total Hours: 33

Code	Title	Hours
Required Courses		
POLS 5013	Quantitative Methods	3
POLS 5103	Research Design	3
POLS 5203	ProSeminar in International Relations	3
POLS 5403	ProSeminar in Comparative Politics	3
POLS 5703	ProSeminar in American Politics	3
POLS 5000	Thesis	3
Hours Subtotal		18
Electives		
Select two advanced topics courses (e.g., POLS 5710, POLS 5210, POLS 5410) or equivalent. Must be in two separate subfields.		6
Any three graduate-level courses.		9
Hours Subtotal		15
Total Hours		33

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Public Health: Rural and Underserved Populations, MPH

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 42

Code	Title	Hours
Core Courses		
MPH 5653	Foundations of Public Health Education and Promotion	3
REMS 5953	Statistical Methods in Education	3
HLTH 5323	General Epidemiology	3
HLTH 5133	Environmental Health	3
HCA 5013	Survey of Health Care Administration	3
MC 5953	Strategic Health Communications Campaigns	3
or AGCM 5403	Public Relations Campaigns in Agricultural Sciences and Natural Resources	
HCA 5093	Leadership Methods and Styles in Healthcare	3
or HCA 5043	Organizational Leadership and Development in Health Care	
MPH 5453	Cultural Issues in Health	3
REMS 5013	Research Design and Methodology	3
or HDFS 5133	Research Methods in HDFS II	
MPH 5683	Health Behavior Theory and Practice for Public Health	3
HLTH 5973	Designing Public Health Programs	3
Select 3 hours of the following:		3
AECL 6223	Program Evaluation in Agriculture and Extension	
HLTH 5983	Implementation and Evaluation of Public Health Programs	
REMS 6373	Program Evaluation	
Hours Subtotal		36
Guided Electives		
HLTH 5113	Psychological Aspects of Health	
NSCI 5323	Nutrition and Physical Activity in Aging	
HLTH 5233	Sexuality and Health	
NSCI 5453	Nutrition and Health Disparities	
NSCI 5553	Global Nutrition and Food Security	
NSCI 5713	Advanced Community Nutrition	
HDFS 5153	Policy in Human Development and Family Science	
HDFS 5403	Perspectives in Gerontology	
HDFS 5411	Ethics and Aging	
HDFS 5433	Theories of Aging	
HDFS 5493	Aging and Diverse Families	
HDFS 5523	Family Theory	

HDFS 5583	Intimate Relationships and Sexuality across the Lifespan	
Thesis		
MPH 5000	Master's Thesis	6
Hours Subtotal		6
Total Hours		42

Public Health Practicum

Total Hours: 42

Code	Title	Hours
Core Courses		
MPH 5653	Foundations of Public Health Education and Promotion	3
REMS 5953	Statistical Methods in Education	3
HLTH 5323	General Epidemiology	3
HLTH 5133	Environmental Health	3
HCA 5013	Survey of Health Care Administration	3
MC 5953	Strategic Health Communications Campaigns	3
or AGCM 5403	Public Relations Campaigns in Agricultural Sciences and Natural Resources	
HCA 5093	Leadership Methods and Styles in Healthcare	3
or HCA 5043	Organizational Leadership and Development in Health Care	
MPH 5453	Cultural Issues in Health	3
MPH 5683	Health Behavior Theory and Practice for Public Health	3
HLTH 5973	Designing Public Health Programs	3
Select 3 hours of the following:		3
AECL 6223	Program Evaluation in Agriculture and Extension	
REMS 6373	Program Evaluation	
Hours Subtotal		33
Guided Electives		
Select 6 hours		6
HLTH 5113	Psychological Aspects of Health	
NSCI 5323	Nutrition and Physical Activity in Aging	
HLTH 5233	Sexuality and Health	
NSCI 5453	Nutrition and Health Disparities	
NSCI 5553	Global Nutrition and Food Security	
NSCI 5713	Advanced Community Nutrition	
HDFS 5153	Policy in Human Development and Family Science	
HDFS 5403	Perspectives in Gerontology	
HDFS 5411	Ethics and Aging	
HDFS 5433	Theories of Aging	
HDFS 5493	Aging and Diverse Families	
HDFS 5523	Family Theory	
HDFS 5583	Intimate Relationships and Sexuality across the Lifespan	
Hours Subtotal		6
Public Health Practicum		

MPH 5030	Master of Public Health Practicum	3
Hours Subtotal		3
Total Hours		42

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Quantitative Finance, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 33

Code	Title	Hours
Required Courses		
FIN 5223	Investment Theory and Strategy	3
FIN 5550	Special Topics in Finance	3
FIN 5653	Bond Markets	3
FIN 5763	Derivative Securities and the Management of Financial Price Risk	3
FIN 5883	Quantitative Financial Applications	3
MATH 5473	Financial Calculus	3
Electives (Partial list)		
Select 15 hours from the following:		15
AGEC 5103	Mathematical Economics	
AGEC 5113	Applications of Mathematical Programming	
AGEC 5213	Econometric Methods	
ECEN 5193	Power Economics and Regulation	
FIN 5053	Theory and Practice of Financial Management	
FIN 5363	Energy Finance	
FIN 5243	Financial Markets	
FIN 5773	Financial Engineering	
FIN 5833	Student Managed Investment Fund	
STAT 5053	Time Series Analysis	
STAT 5133	Stochastic Processes	
MATH 4513	Numerical Analysis	
or CS 4513	Numerical Mathematics: Analysis	
MATH 5543	Numerical Analysis for Differential Equations	
MATH 5553	Numerical Analysis for Linear Algebra	
MATH 5143	Real Analysis I	
MATH 5593	Methods of Applied Mathematics	
IEM 5703	Discrete System Simulation	
MKTG 5963	Data Mining and Customer Relationship Management Applications	
Total Hours		33

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Social Foundations of Education, MA

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 36

Code	Title	Hours
Required Courses		
SCFD 5123	History of Education	3
SCFD 5713	Educational Philosophy	3
SCFD 5873	Culture, Society and Education	3
SCFD 5883	Educational Sociology	3
Hours Subtotal		12
Research and Inquiry		
REMS 5013	Research Design and Methodology	3
REMS 5953	Statistical Methods in Education	3
SCFD 5913	Introduction to Qualitative Inquiry	3
Hours Subtotal		9
Electives		
SCFD 5923	Popular Culture and Education	3
EDLE 5813	Leadership Theory and Ethical Decision Making	3
GWST 5300	Seminar in Gender and Women's Studies	3
Hours Subtotal		9
Master's Thesis		
SCFD 5000	Master's Report or Thesis	6
Hours Subtotal		6
Total Hours		36

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Sociology, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 31

Code	Title	Hours
Required Coursework		
Sociological Theory		
Select 3 hours		6
SOC 5113	Classical Sociological Theory	
SOC 5123	Contemporary Sociological Theory	
Social Research Methods		
Select 6 hours		3
SOC 5243	Social Research Design	
SOC 5273	Qualitative Research Methods	
SOC 5283	Advanced Qualitative Sociological Research	
SOC 5950	Seminar in Sociology	
Statistics		
Select 3 hours		3
SOC 5263	Quantitative Analysis of Social Research	
SOC 5950	Seminar in Sociology	
Additional Sociology Courses		
Select 12 hours		12
SOC 5063	Seminar in Social Inequality and Stratification	
SOC 5643	Gender and Society	
SOC 5653	Gender and the Middle East	
SOC 5663	American Pluralism, Race and Ethnicity in American Life	
SOC 5463	Seminar in Environmental Sociology	
SOC 5493	Seminar in Environmental Justice	
SOC 6493	Sociology of Disaster	
SOC 5323	Seminar on Collective Behavior and Social Movements	
SOC 6653	Seminar in Social Psychology	
SOC 6753	Seminar in Deviance and Criminology	
SOC 5343	Sociology of Law and Punishment	
SOC 5583	Comparative Criminal Justice Systems	
SOC 5950	Seminar in Sociology	
Hours Subtotal		24
Thesis		
Select 6 hours of approved thesis coursework.		6
Hours Subtotal		6
Pro-Seminar		
Select 1 hour of approved pro-seminar coursework.		1
Hours Subtotal		1
Total Hours		31

Non-Thesis Option

Total Hours: 32

Code	Title	Hours
Required Coursework		
Sociological Theory		
Select 3 hours		6
SOC 5113	Classical Sociological Theory	
SOC 5123	Contemporary Sociological Theory	
Social Research Methods		
Select 6 hours		3
SOC 5243	Social Research Design	
SOC 5273	Qualitative Research Methods	
SOC 5283	Advanced Qualitative Sociological Research	
SOC 5950	Seminar in Sociology	
Statistics		
Select 3 hours		3
SOC 5263	Quantitative Analysis of Social Research	
SOC 5950	Seminar in Sociology	
Additional Sociology Courses		
Select 16 hours		16
SOC 5063	Seminar in Social Inequality and Stratification	
SOC 5643	Gender and Society	
SOC 5653	Gender and the Middle East	
SOC 5663	American Pluralism, Race and Ethnicity in American Life	
SOC 5463	Seminar in Environmental Sociology	
SOC 5493	Seminar in Environmental Justice	
SOC 6493	Sociology of Disaster	
SOC 5323	Seminar on Collective Behavior and Social Movements	
SOC 6653	Seminar in Social Psychology	
SOC 6753	Seminar in Deviance and Criminology	
SOC 5343	Sociology of Law and Punishment	
SOC 5583	Comparative Criminal Justice Systems	
SOC 5950	Seminar in Sociology	
Hours Subtotal		28
Creative Component		
SOC 5013	Creative Component in Sociology	3
Hours Subtotal		3
Pro-Seminar		
Select 1 hour of approved pro-seminar coursework.		1
Hours Subtotal		1
Total Hours		32

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic

regulations for minimal GPA, language proficiency and other general requirements.

Statistics, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 36

Code	Title	Hours
Required Courses		
STAT 5013	Statistics for Experimenters I	3
STAT 5023	Statistics for Experimenters II	3
STAT 5063	Statistical Machine Learning with R	3
STAT 5193	SAS and R Programming	3
STAT 5123	Probability Theory	3
STAT 5223	Statistical Inference	3
STAT 5303	Experimental Designs	3
STAT 5323	Theory of Linear Models I	3
STAT 5333	Theory of Linear Models II	3
Select a three-hour graduate-level course, excluding those with STAT or MATH prefixes. ¹		3
Hours Subtotal		30
Thesis		
Select 6 hours		6
Hours Subtotal		6
Total Hours		36

¹ The following courses will NOT be allowed to count toward this outside course: AGECE 5103, BAE 5513, ECON 4213, IEM 5003, IEM 5133, PSYC 5303, PSYC 5313, REMS 5013, REMS 5953, REMS 6003, REMS 6013.

Formal Report

Total Hours: 32

Code	Title	Hours
Required Courses		
STAT 5013	Statistics for Experimenters I	3
STAT 5023	Statistics for Experimenters II	3
STAT 5063	Statistical Machine Learning with R	3
STAT 5193	SAS and R Programming	3
STAT 5123	Probability Theory	3
STAT 5223	Statistical Inference	3
STAT 5303	Experimental Designs	3
STAT 5323	Theory of Linear Models I	3
STAT 5333	Theory of Linear Models II	3
Select a three-hour graduate-level course, excluding those with STAT or MATH prefixes. ¹		3
Hours Subtotal		30
Formal Report		
Select 2 hours		2

Hours Subtotal	2
Total Hours	32

¹ The following courses will NOT be allowed to count toward this outside course: AGECE 5103, BAE 5513, ECON 4213, IEM 5003, IEM 5133, PSYC 5303, PSYC 5313, REMS 5013, REMS 5953, REMS 6003, REMS 6013.

Creative Component

Total Hours: 36

Code	Title	Hours
Required Courses		
STAT 5013	Statistics for Experimenters I	3
STAT 5023	Statistics for Experimenters II	3
STAT 5063	Statistical Machine Learning with R	3
STAT 5193	SAS and R Programming	3
STAT 5123	Probability Theory	3
STAT 5223	Statistical Inference	3
STAT 5303	Experimental Designs	3
STAT 5323	Theory of Linear Models I	3
STAT 5333	Theory of Linear Models II	3
Select a three-hour graduate-level course, excluding those with STAT or MATH prefixes. ¹		3
Hours Subtotal		30
Select 6 hours of approved coursework to include a Creative Component		6
Hours Subtotal		6
Total Hours		36

¹ The following courses will NOT be allowed to count toward this outside course: AGECE 5103, BAE 5513, ECON 4213, IEM 5003, IEM 5133, PSYC 5303, PSYC 5313, REMS 5013, REMS 5953, REMS 6003, REMS 6013.

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Teaching, Learning and Leadership: Curriculum and Leadership Studies, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 36

Code	Title	Hours
Common Core		
CIED 5053	Curriculum Issues	3
CIED 5813	Educational Advocacy and Leadership	3
Hours Subtotal		6
Research and Inquiry		
CIED 5073	Pedagogical Research	3
Selected Research course with advisor's approval		3
Example courses:		
SCFD 5913	Introduction to Qualitative Inquiry	
REMS 5953	Statistical Methods in Education	
REMS 5013	Research Design and Methodology	
Hours Subtotal		6
Program Core		
CIED 5623	Multicultural and Diversity Issues in Curriculum	3
CIED 5043	Issues in Teaching	3
Or selected course with advisor's approval		
Hours Subtotal		6
Area of Emphasis		
<i>Curriculum and Leadership</i>		
Select 12 hours from the following:		12
CIED 5043	Issues in Teaching	
CIED 5123	Curriculum in the Secondary School	
CIED 5173	Kindergarten-Primary Curriculum	
CIED 5183	Media Literacy Across the Curriculum	
CIED 5313	Curriculum of the Elementary School	
CIED 5343	Introduction to K-12 English Language Learners	
CIED 5623	Multicultural and Diversity Issues in Curriculum	
CIED 5723	Gender and Curriculum	
CIED 5730	Seminar in Education	
CIED 5823	Mindfulness, Curriculum, and Teaching	
OSU Writing Project OR other courses with Advisor's approval		
Hours Subtotal		12
Thesis		
CIED 5000	Master's Report or Thesis	6
Hours Subtotal		6
Total Hours		36

Creative Component Option

Total Hours: 36

Code	Title	Hours
Common Core		
CIED 5053	Curriculum Issues	3
CIED 5813	Educational Advocacy and Leadership	3
Hours Subtotal		6
Research and Inquiry		
CIED 5073	Pedagogical Research	3
Selected Research course with advisor's approval		3
Example courses:		
SCFD 5913	Introduction to Qualitative Inquiry	
REMS 5953	Statistical Methods in Education	
REMS 5013	Research Design and Methodology	
Hours Subtotal		6
Program Core		
CIED 5623	Multicultural and Diversity Issues in Curriculum	3
CIED 5043	Issues in Teaching	3
Or selected course with advisor's approval		
Hours Subtotal		6
Area of Emphasis		
<i>Curriculum and Leadership</i>		
Select 12 hours from the following:		12
CIED 5043	Issues in Teaching	
CIED 5123	Curriculum in the Secondary School	
CIED 5173	Kindergarten-Primary Curriculum	
CIED 5183	Media Literacy Across the Curriculum	
CIED 5313	Curriculum of the Elementary School	
CIED 5343	Introduction to K-12 English Language Learners	
CIED 5623	Multicultural and Diversity Issues in Curriculum	
CIED 5723	Gender and Curriculum	
CIED 5730	Seminar in Education	
CIED 5823	Mindfulness, Curriculum, and Teaching	
OSU Writing Project OR other courses with Advisor's approval		
Hours Subtotal		12
Electives		
Courses with Advisor's approval		6
Hours Subtotal		6
Total Hours		36

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Teaching, Learning and Leadership: Gifted and Talented Education, MS

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 36

Code	Title	Hours
Degree Core		
CIED 5053	Curriculum Issues	3
CIED 5813	Educational Advocacy and Leadership	3
GTED 5063	Introduction to Gifted and Talented Education	3
GTED 5163	Counseling Techniques for Teachers of Gifted and Talented Students	3
GTED 5363	Differentiating Curriculum for Gifted Learners	3
GTED 5620	Practicum with Exceptional Learners	3
GTED 5763	Teaching Methods and Techniques for Gifted Education	3
GTED 5863	Developing Programs for the Gifted and Talented	3
GTED 5993	Identification and Behavioral Characteristics of the Gifted and Talented	3
Select 3 hours from the following:		3
CIED 5073	Pedagogical Research	
REMS 5013	Research Design and Methodology	
REMS 5953	Statistical Methods in Education	
SCFD 5913	Introduction to Qualitative Inquiry	
Hours Subtotal		30
Electives		
Select 6 hours from any discipline in consultation with your advisory committee.		6
Hours Subtotal		6
Total Hours		36

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Teaching, Learning and Leadership: K-12 Ed, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 36

Code	Title	Hours
Common Core		
CIED 5053	Curriculum Issues *	3
CIED 5813	Educational Advocacy and Leadership *	3
Hours Subtotal		6
Research Requirement		
Select one research course and ensure three courses found in the common or program core that are designated with an asterisk (*) are selected.		3
SCFD 5913	Introduction to Qualitative Inquiry (OR)	
REMS 5013	Research Design and Methodology (OR)	
CIED 5073	Pedagogical Research (OR)	
REMS 5953	Statistical Methods in Education	
Hours Subtotal		3
Program Core		
CIED 5043	Issues in Teaching *	3
Select 3 hours from the following:		3
CIED 5343	Introduction to K-12 English Language Learners	
CIED 5623	Multicultural and Diversity Issues in Curriculum *	
CIED 5663	Integrating Teaching in the Secondary School	
SMED 5183	Social Justice by the Numbers: Learning to Teach Science & Math for Understanding & Equity	
SPED 5993	Culturally Responsive Teaching in Special Education	
Hours Subtotal		6
Areas of Emphasis		
In consultation with an advisor, select 21 hours from the following:		21
CIED 5713	Teaching and Learning in the Secondary School	
CIED 5350	The Visual Arts in the Curriculum	
CIED 5153	Advanced Studies in Children's Literature	
CIED 5353	Literature for Children, Adolescents and Adults	
CIED 5443	Teaching Reading with Literature	
CIED 5513	Young Adult Literature	
CIED 5173	Kindergarten-Primary Curriculum	
CIED 5313	Curriculum of the Elementary School	
CIED 5123	Curriculum in the Secondary School	
CIED 5143	Language Arts in the Curriculum	
CIED 5183	Media Literacy Across the Curriculum	

CIED 5433	Reading and Writing in the Content Areas
CIED 5463	Reading Assessment and Instruction
CIED 5473	Reading & Writing Difficulties
CIED 5483	Literacy and Technology Across the Curriculum
CIED 5553	Literacy Leadership and Coaching
CIED 5733	History of Reading
CIED 5843	First and Second Language Acquisition for Teachers
CIED 5863	Foreign Language Instruction, Curriculum and Assessment: Grades PK-12
CIED 5423	Literacy Instruction in Primary Grades *
CIED 5523	Practicum in Reading Instruction
CIED 5493	Multisensory Phonics Instruction
SMED 5050	Seminar in Integrated Mathematics and Science Applications
SMED 5253	Teaching Rational Number Concepts, Proportional Reasoning, and Classroom Interactions *
SMED 5263	Assessment and Evaluation in School Mathematics *
SMED 5270	Practicum in School Mathematics
SMED 5273	Number Concepts and Assessment at the Elementary Level (PK-6)
SMED 5283	Problem-Centered Learning in Mathematics
SMED 5293	Teaching and Learning Mathematics in Technology *
SMED 5913	Teaching Geometry and Spatial Visualization
SMED 5923	Teaching Algebra and Mathematical Tasks
SMED 5933	Teaching Data and Probability in Schools
SMED 5943	Mathematics Leadership and Coaching
SMED 5203	Teaching the Nature of Science Through and Inquiry Approach
SMED 5713	Teaching and Learning Science in the Secondary School
SMED 5193	Inquiry and Problem-Based Learning in Science Education
SMED 5223	Teaching Science in the Schools
SMED 5050	Seminar in Integrated Mathematics and Science Applications
SMED 5243	Environmental Education in the Curriculum
SMED 5280	Workshop in Science Education
SMED 5313	Introduction to K-12 Engineering Education
SMED 5323	Technology for the K-12 STEM Educator
SMED 5333	Developing Informal and Formal STEM Programs in Schools
CIED 5323	Teaching Social Studies in the Schools
SPED 5623	Characteristics of Students with Mild/Moderate Disabilities
SPED 5743	Planning, Compliance and Current Practices
SPED 5883	Classroom and Behavior Management
SPED 5993	Culturally Responsive Teaching in Special Education

CIED 5720	Education Workshop	
CIED 5730	Seminar in Education	
CIED 5373	Design and Management of the Elementary School Classroom	
CIED 5893	Reading Processes and Practices GR 1-8	
SMED 5013	Mathematics Education: Theory and Practice(Grade 1-4)	
SMED 5083	Teaching Science in the Elementary School (Grades 1-8)	
CIED 5333	Effective Classroom Management for Secondary Schools	
CIED 5363	Effective Teaching Strategies for the 6-12 Classroom	
CIED 5010	Practicum for Early Career Secondary Teachers	
CIED 5403	Teaching and Learning in the Secondary Schools: English Language Arts Methods	
CIED 5413	Teaching and Learning in the Secondary Schools: Social Studies Methods	
SMED 5153	Methods for Teaching Secondary Math	
SMED 5143	Methods for Teaching Secondary Science	
Hours Subtotal		21
Total Hours		36

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Teaching, Learning and Leadership: Mathematics/Science Education, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 36

Code	Title	Hours
Common Program Core		
CIED 5053	Curriculum Issues	3
CIED 5813	Educational Advocacy and Leadership	3
Hours Subtotal		6
Research Requirement		
Select 6 hours from the following:		6
CIED 5073	Pedagogical Research	
MATH 5913	Introduction to Research in Mathematics Education	
REMS 5013	Research Design and Methodology	
REMS 5953	Statistical Methods in Education	
STAT 5013	Statistics for Experimenters I	
SCFD 5913	Introduction to Qualitative Inquiry	
Hours Subtotal		6
Program Core		
SMED 5750	Seminar in Mathematics Education	3
SMED 5193	Inquiry and Problem-Based Learning in Science Education	3
or SMED 5283	Problem-Centered Learning in Mathematics	
Hours Subtotal		6
Areas of Emphasis		
Select 12 hours		12
Hours Subtotal		12
Elective or Thesis		
Select 6 hours		6
SMED 5050	Seminar in Integrated Mathematics and Science Applications	
SMED 5193	Inquiry and Problem-Based Learning in Science Education	
SMED 5223	Teaching Science in the Schools	
SMED 5243	Environmental Education in the Curriculum	
SMED 5253	Teaching Rational Number Concepts, Proportional Reasoning, and Classroom Interactions	
SMED 5263	Assessment and Evaluation in School Mathematics	
SMED 5270	Practicum in School Mathematics	
SMED 5273	Number Concepts and Assessment at the Elementary Level (PK-6)	
SMED 5280	Workshop in Science Education	
SMED 5283	Problem-Centered Learning in Mathematics	
SMED 5293	Teaching and Learning Mathematics in Technology	
SMED 5313	Introduction to K-12 Engineering Education	

SMED 5323	Technology for the K-12 STEM Educator	
SMED 5333	Developing Informal and Formal STEM Programs in Schools	
SMED 5613	Effective Teaching of Mathematics in the Secondary School	
SMED 5750	Seminar in Mathematics Education	
SMED 5813	Assessment in Science Education	
SMED 5913	Teaching Geometry and Spatial Visualization	
SMED 5923	Teaching Algebra and Mathematical Tasks	
SMED 5933	Teaching Data and Probability in Schools	
SMED 5943	Mathematics Leadership and Coaching	
Hours Subtotal		6
Total Hours		36

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Teaching, Learning and Leadership: Reading and Literacy, MS

Requirements for Students Matriculating in or before Academic Year

2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 36

Code	Title	Hours
Common Core		
CIED 5053	Curriculum Issues	3
CIED 5813	Educational Advocacy and Leadership	3
Hours Subtotal		6
Research and Inquiry		
Select 3 hours from the following:		3
SCFD 5913	Introduction to Qualitative Inquiry	
REMS 5013	Research Design and Methodology	
CIED 5073	Pedagogical Research	
Hours Subtotal		3
Area of Emphasis (Reading Specialist Certification Program)		
CIED 5143	Language Arts in the Curriculum	3
CIED 5153	Advanced Studies in Children's Literature	3
CIED 5423	Literacy Instruction in Primary Grades	3
CIED 5433	Reading and Writing in the Content Areas	3
CIED 5463	Reading Assessment and Instruction	3
CIED 5523	Practicum in Reading Instruction	3
CIED 5553	Literacy Leadership and Coaching	3
Hours Subtotal		21
Electives or Thesis		
Select 6 hours		6
Hours Subtotal		6
Total Hours		36

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Teaching, Learning and Leadership: Special Education, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 36

Code	Title	Hours
Common Core		
CIED 5053	Curriculum Issues	3
CIED 5813	Educational Advocacy and Leadership	3
Hours Subtotal		6
Research and Inquiry		
Select 3 hours from the following:		3
CIED 5073	Pedagogical Research	
REMS 5013	Research Design and Methodology	
REMS 5953	Statistical Methods in Education	
SPSY 6253	Single Case Designs in Behavior Analytic Settings	
Hours Subtotal		3
Program Core		
SPED 5723	Transition Into Adulthood for Individuals with Disabilities	3
SPED 5743	Planning, Compliance and Current Practices	3
Area of Emphasis		
Select one emphasis (15 hours)		15
<i>Behavior and Academic Interventionist</i>		
FDEP 5493	Psychology of Learning and Behavior	
SPSY 5853	Applied Behavior Analysis	
SPSY 5873	Applied Behavior Analysis II	
SPSY 6313	Advanced Interventions for Increased Academic Achievement	
SPSY 6343	Behavioral Assessment and Consultation	
Or related coursework as deemed appropriate by student's advisor.		
<i>Mild/Moderate Disabilities</i>		
Select 15 hours from the following:		
CIED 5473	Reading & Writing Difficulties	
SPED 5123	Characteristics and Teaching Methods for Students with Autism Spectrum Disorders	
SPED 5623	Characteristics of Students with Mild/Moderate Disabilities	
SPED 5673	Improving Literacy Skills of Individuals with Disabilities	
SPED 5683	Models of Instruction in the Inclusive Classroom	
SPED 5783	Assessing Students with Disabilities	
SPED 5883	Classroom and Behavior Management	
SPED 5993	Culturally Responsive Teaching in Special Education	
Hours Subtotal		21

Electives or Thesis

Select up to 6 hours with Advisor approval. 6

Each student must complete either 6 hours of thesis (SPED 5000 or equivalent content course) or SPED 5150 (3 hours) and 3 hours of electives. Students must discuss their options with their advisor.

Hours Subtotal 6

Total Hours 36

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Teaching, Learning and Leadership: Workforce and Adult Education, MS

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 36

Code	Title	Hours
Common Core		
CIED 5053	Curriculum Issues	3
CIED 5813	Educational Advocacy and Leadership	3
Hours Subtotal		6
Research and Inquiry Requirement		
WAED 5443	Interpreting Research in Workforce and Adult Education	3
Select three hours from the following:		3
REMS 5013	Research Design and Methodology	
REMS 5953	Statistical Methods in Education	
SCFD 5913	Introduction to Qualitative Inquiry	
STAT 5013	Statistics for Experimenters I	
Hours Subtotal		6
Program Core		
WAED 5153	Curriculum Planning in Workforce and Adult Education	3
WAED 5233	Advanced Instructional Procedures in Workforce and Adult Education	3
WAED 5313	History, Principles, and Organization of Workforce Education	3
Hours Subtotal		9
Areas of Emphasis		
Select 15 hours from, but not limited to, the following (students should work with advisor to select courses appropriate for emphasis in WAED teaching, administration, workforce development or engineering education):		15
CTED 4123	Coordinating Career and Technical Student Organizations and Activities	
CTED 4213	Safety, Organization and Management of Learning Facilities	
EDLE 5723	Education Law	
WAED 5000	Thesis or Report	
WAED 5010	Seminar	
WAED 5013	Characteristics of Adult Learners	
WAED 5113	Principles of Leadership in Workforce Education	
WAED 5123	Evaluation of Workforce and Adult Education Programs and Instruction	
WAED 5133	Internationalism, Globalization and Workforce Education	
WAED 5143	Organization and Administration of Adult Education	
WAED 5203	Foundations of Adult and Continuing Education	

WAED 5223	Program Planning for Workforce and Adult Educators	
WAED 5333	Administration and Supervision of Workforce Education Programs	
WAED 5340	Special Problems in Workforce and Adult Education	
WAED 5353	Instructional Strategies for Adults	
WAED 5423	Individualized Competency Based Instruction and Customized Training	
WAED 5703	Adult Learning in Diverse Settings	
WAED 5720	Workshop	
WAED 5730	Special Topics in Adult Education	
WAED 5833	Global Consulting	
WAED 5880	Internship in Workforce and Adult Education	
WAED 5910	Developing and Analyzing Teaching Content	
Hours Subtotal		15
Total Hours		36

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Teaching: Elementary, MATT

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 39

Code	Title	Hours
Degree Core		
<i>Required Courses</i>		
CIED 5093	Curriculum Design	3
CIED 5213	Introduction to Teaching and Learning	3
CIED 5343	Introduction to K-12 English Language Learners	3
SPED 5633	Behavior Characteristics of Exceptional Individuals	3
Hours Subtotal		12
Specialization		
CIED 4323	Social Studies in the Elementary School Curriculum	3
CIED 4362	Design and Management of the Elementary School Classroom	2
CIED 5853	Teaching Writing GR 1-8	3
CIED 5893	Reading Processes and Practices GR 1-8	3
CIED 5973	Formative Literacy Assessment GR 1-8	3
SMED 4153	Teaching Mathematics at the Intermediate Level	3
SMED 5013	Mathematics Education: Theory and Practice(Grade 1-4)	3
SMED 5083	Teaching Science in the Elementary School (Grades 1-8)	3
Hours Subtotal		23
Internship		
Minimum of 4 hours		4
CIED 5310	Field Experience in the Elementary School (Minimum of 1 hour)	
CIED 5450	Internship in Elementary Education (Minimum of 3 hours)	
Hours Subtotal		4
Total Hours		39

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Teaching: Secondary Mathematics, MATT

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 34

Code	Title	Hours
Common Core		
CIED 5093	Curriculum Design	3
CIED 5213	Introduction to Teaching and Learning	3
CIED 5343	Introduction to K-12 English Language Learners	3
SPED 5633	Behavior Characteristics of Exceptional Individuals	3
Hours Subtotal		12
Concentration in Secondary Mathematics		
SMED 4003	Teaching Fundamental Concepts of Mathematics	3
SMED 4053	Teaching Geometry in the Secondary School	3
SMED 4723	Senior Seminar in Secondary Mathematics and Science Education	3
SMED 5113	Knowing and Learning in Mathematics and Science	3
SMED 5123	Classroom Interactions in Mathematics and Science	3
SMED 5133	Problem-Based Learning in Mathematics and Science	3
Hours Subtotal		18
Internship		
CIED 5710	Internship in Secondary School (Minimum of 4 hours)	4
Hours Subtotal		4
Total Hours		34

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Teaching: Secondary Science, MATT

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Total Hours: 34

Code	Title	Hours
Common Core		
CIED 5093	Curriculum Design	3
CIED 5213	Introduction to Teaching and Learning	3
CIED 5343	Introduction to K-12 English Language Learners	3
SPED 5633	Behavior Characteristics of Exceptional Individuals	3
Hours Subtotal		12
Concentration in Secondary Science		
SMED 5203	Teaching the Nature of Science Through and Inquiry Approach	3
SMED 5713	Teaching and Learning Science in the Secondary School	3
SMED 5723	Senior Seminar in the Secondary Mathematics and Science Education	3
SMED 5113	Knowing and Learning in Mathematics and Science	3
SMED 5123	Classroom Interactions in Mathematics and Science	3
SMED 5133	Problem-Based Learning in Mathematics and Science	3
Hours Subtotal		18
Internship		
CIED 5710	Internship in Secondary School (Minimum of 4 hours)	4
Hours Subtotal		4
Total Hours		34

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.

Theatre, MA

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (p.).

Thesis Option

Total Hours: 30

Code	Title	Hours
Required Core		
TH 4953	Directing	3
TH 5113	Theatre History and Theory I	3
TH 5513	Theatre History and Theory II	3
TH 5313	Dramaturgy	3
TH 5600	Seminar in Dramatic Literature	3
	One approved graduate-level seminar outside of the Department of Theatre	3
Hours Subtotal		18
Electives		
	Select 6 hours	6
TH 5240	Topics in Advanced Acting	
TH 5400	Seminar in Theatre	
TH 5500	Individual Theatre Projects	
TH 5953	Problems in Advanced Directing	
TH 5600	Seminar in Dramatic Literature	
	Graduate electives in other departments TH 4000-level courses with an * in the OSU Catalog.	
Hours Subtotal		6
Thesis		
TH 5000	Master's Thesis and Research	6
Hours Subtotal		6
Total Hours		30

Non-Thesis Option

Total Hours: 32

Code	Title	Hours
Required Core		
TH 4953	Directing	3
TH 5113	Theatre History and Theory I	3
TH 5513	Theatre History and Theory II	3
TH 5313	Dramaturgy	3
TH 5600	Seminar in Dramatic Literature	3
	One approved graduate-level seminar outside of the Department of Theatre	3
Hours Subtotal		18
Electives		
	Select 11 hours	11
TH 5240	Topics in Advanced Acting	
TH 5400	Seminar in Theatre	
TH 5500	Individual Theatre Projects	
TH 5953	Problems in Advanced Directing	

TH 5600	Seminar in Dramatic Literature	
Graduate electives in other departments TH 4000-level courses with an * in the OSU Catalog.		
Hours Subtotal		11
Creative Component		
TH 5100	Master's Creative Component and Research	3
Hours Subtotal		3
Total Hours		32

Graduate College Master's Program Requirements

Learn more about Graduate College 2021-2022 Master's Degree Program Requirements (p. 2773). Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.