

Graduate College

Graduate College Calendar

(Refer also to the "University Calendar")

First Semester 2001-2002, Fall 2001

- August 20, Monday
Class work begins
- August 31, Friday
Last day to file a diploma application
- August 31, Friday
Applications for graduate credit for graduating seniors due
- November 2, Friday
FINAL DRAFT copy of dissertations, theses and reports due
- November 2, Friday
Application for admission to spring candidacy due for doctoral and Ed.S. candidates
- November 16, Friday
RESULTS of doctoral, Ed.S., and Plan I, Plan II or Plan III master's FINAL EXAMINATIONS due
- November 30, Friday
FINAL COPIES of dissertations, theses and reports due by fall candidates
- December 14, Friday
Graduate College Hooding Convocation
- December 14, Friday
Class work ends

Second Semester 2001-2002, Spring 2002

- January 14, Monday
Class work begins
- January 25, Friday
Last day to file a diploma application
- January 25, Friday
Applications for graduate credit for graduating seniors due
- February 1, Friday
Application for admission to summer candidacy due for doctoral and Ed.S. candidates
- March 29, Friday
FINAL DRAFT copy of dissertations, theses and reports due
- April 12, Friday
RESULTS of doctoral, Ed.S., and Plan I, Plan II or Plan III master's FINAL EXAMINATIONS due
- April 26, Friday
FINAL COPIES of dissertations, theses and reports due by spring candidates
- May 10, Friday
Class work ends

- May 10, Friday
Graduate College Hooding Convocation
- May 11, Saturday
University Commencement

Summer 2002 Regular 8-Week Summer Session

- June 10, Monday
Class work begins
- June 14, Friday
Last day to file a diploma application
- June 14, Friday
Applications for graduate credit for graduating seniors due
- June 14, Friday
Application for admission to fall candidacy due for doctoral and Ed.S. candidates
- June 21, Friday
FINAL DRAFT copy of dissertations, theses and reports due
- July 5, Friday
RESULTS of doctoral, Ed.S., and Plan I, Plan II or Plan III master's FINAL EXAMINATIONS due
- July 19, Friday
FINAL COPIES of dissertations, theses and reports due by summer candidates
- August 2, Friday
Graduate College Hooding Convocation
- August 2, Friday
Class work ends

First Semester 2002-2003, Fall 2002

- August 19, Monday
Class work begins
- August 30, Friday
Last day to file a diploma application
- August 30, Friday
Applications for graduate credit for graduating seniors due
- November 1, Friday
FINAL DRAFT copy of dissertations, theses and reports due
- November 1, Friday
Application for admission to spring candidacy due for doctoral and Ed.S. candidates
- November 15, Friday
RESULTS of doctoral, Ed.S., and Plan I, Plan II or Plan III master's FINAL EXAMINATIONS due
- December 2, Monday
FINAL COPIES of dissertations, theses and reports due by fall candidates
- December 13, Friday
Graduate College Hooding Convocation
- December 13, Friday
Class work ends

Second Semester 2002-2003, Spring 2003

- January 13, Monday
Class work begins
- January 24, Friday
Last day to file a diploma application
- January 24, Friday
Applications for graduate credit for graduating seniors due
- January 31, Friday
Application for admission to summer candidacy due for doctoral and Ed.S. candidates
- March 28, Friday
FINAL DRAFT copy of dissertations, theses and reports due
- April 11, Friday
RESULTS of doctoral, Ed.S., and Plan I, Plan II or Plan III master's FINAL EXAMINATIONS due
- April 25, Friday
FINAL COPIES of dissertations, theses and reports due by spring candidates
- May 9, Friday
Class work ends
- May 9, Friday
Graduate College Hooding Convocation
- May 10, Saturday
University Commencement

Summer 2003 Regular 8-Week Summer Session

- June 9, Monday
Class work begins
- June 13, Friday
Last day to file a diploma application
- June 13, Friday
Applications for graduate credit for graduating seniors due
- June 13, Friday
Application for admission to fall candidacy due for doctoral and Ed.S. candidates
- June 20, Friday
FINAL DRAFT copy of dissertations, theses and reports due
- July 7, Monday
RESULTS of doctoral, Ed.S., and Plan I, Plan II or Plan III master's FINAL EXAMINATIONS due
- July 18, Friday
FINAL COPIES of dissertations, theses and reports due by summer candidates
- August 1, Friday
Graduate College Hooding Convocation
- August 1, Friday
Class work ends

Timothy J. Pettibone, Ph.D., Dean
Alfred F. Carlozzi, Ed.D., Associate Dean

Craig Satterfield, Ed.D., Director of Student Academic Services

Michael Heppler, M.Ed., Assistant Director of Student Academic Services

The Graduate College is the hub of advanced study, research and creativity at Oklahoma State University. Faculty and students share an obligation to achieve greater knowledge and to present it to the scholarly community. Research is best done in an atmosphere where common goals exist. An esprit de corps exists in the OSU academic community where the goals are to maintain regional and national recognition, to provide an exciting research environment where students and faculty can make significant contributions to the store of knowledge, and to encourage each individual to reach his or her potential.

For additional information, the Graduate College may be reached at:
Phone: 1-405-744-6368 or
1-800-227-GRAD
FAX: 405-744-0355
E-Mail: grad-i@okstate.edu
Internet: <http://www.osu-ours.okstate.edu/gradcoll>

Organization of the Graduate College

The Graduate College administers regulations and standards specified and established by the Graduate Faculty. The Graduate Faculty Council is elected by the Graduate Faculty to work with the



dean of the Graduate College in development and administration of policy. The Graduate Faculty Council is the executive committee of the Graduate Faculty. It formulates and reviews policies concerning with the conduct of graduate study at OSU. All new policies are referred to the Graduate Faculty Council or the general Graduate Faculty for approval.

All departmental requests for permission to offer advanced degrees are referred to the Graduate Faculty Council for recommendation.

All requests for waiver of any rules or regulations as listed in the *Catalog* must be in the form of petitions to the dean of the Graduate College. A supporting letter from the major adviser is also required.

Graduate Council Members

Timothy J. Pettibone, Dean
Peter Moretti, Vice-Chair

Group I --Biological Sciences

Brian Kahn
Cyril Clarke
Jerry Malayer

Group II--Humanities

Susan Garzon
Dennis Seager
Richard Batteiger

Group III--Physical Sciences and Technology

Paul Westhaus
Gary Young
Dale Alspach

Group IV--Social Sciences

David Knottnerus
Kathleen Briggs
Elizabeth Williams

Group V--Teacher Education

Debra Jordan
James Leising
Kevin Hayes

Research at Oklahoma State University

Research, a critical dimension of the mission of the University, is vital to the growth, health and progress of the state, the region and the nation.

Over the last several years, national attention has turned to economic development. This renewed emphasis on economic development and high technology has been spurred by the advances made by the Asian and European economic communities.

OSU is deeply involved in meeting this challenge. In recent years, significant strides have been taken in developing programs at the cutting edge of technology and basic research. The progress made by the establishment of the Noble

Research Center for Agriculture and Renewable Natural Resources, the Food and Agricultural Products Research and Technology Center, the Center for Laser Research, the robotics and automated manufacturing laboratories, and the biotechnology programs underscore the University's commitment to find solutions to pressing problems.

The *Environmental Institute* was established at OSU to stimulate, coordinate and promote interdisciplinary research and education related to the natural environment. The Institute administers the activities of the University Center for Energy Research, the University Center for Water Research, the Spatial and Environmental Information Clearinghouse, and the environmental sciences graduate program. More information about the Institute and its activities is available on the Internet (<http://www.seic.okstate.edu/envinst/>).

The *University Center for Energy Research (UCER)* encourages research and education in the fields of energy development, production, transmission, use, conservation and pollution. These areas are supported by a campus research grant program, fellowships, coordination of multidisciplinary projects, and transfer of information regarding research and educational opportunities, and results via publications, presentations and seminars.

The *University Center for Water Research (UCWR)* encourages research and education on national, state and local water issues. Support is provided through two research grant programs, fellowships, coordination of multidisciplinary projects, and transfer of information regarding research and educational opportunities via publication of newsletters, reports and special publications, and sponsorship of seminars.

The *Spatial and Environmental Information Clearinghouse (SEIC)* acts as an information link serving OSU researchers and the citizens of Oklahoma. Using World Wide Web and WAIS interfaces, SEIC provides a user-friendly method of locating and retrieving local (Oklahoma) and world-wide spatial and environmental data sets. Accessible on the Internet (<http://www.seic.okstate.edu/>), the SEIC home page allows the user access to information and data on the Environmental Institute and SEIC, Oklahoma and the nation. SEIC also provides search and retrieval services for researchers on the OSU campus and throughout the state.

The *Center for Laser and Photonics Research (CLPR)* conducts cutting-edge research in critical new laser and photonics technologies. Its national and international reputation is based

on its leadership in lasers in basic science, industry, medicine, photonics and other high-tech arenas. The Center provides a focal point of expertise for the support of high-technology industries, research laboratories and medical institutions in Oklahoma and around the country. Faculty are involved in a broad spectrum of research activities including blue-light emitting semi-conducting lasers, development of an optoelectronic THz beam system, construction of a group-velocity matched ultrashort pulse nonlinear frequency conversion schemes, development of the first self-starting and self-mode-locking titanium-sapphire laser, research and development in laser-induced holographic gratings in rare-earth doped glasses and dynamic light scattering studies of colloidal suspensions. The efforts of the Center promote state-of-the-art education for tomorrow's scientists, engineers and technicians, provide important new research in emerging interdisciplinary areas and significantly increase state and national high technology bases. New directions in the Center for Laser and Photonics Research involve a state-wide, multidisciplinary clean room user facility for advanced technology materials and device processing and fabrication, a biophotonics initiative to link lasers and photonics to medical research and the health community, and the development of a new photonics advanced degree program, designed to attract high-quality students to OSU physics, chemistry and electrical engineering departments and better prepare them for the job market through interdisciplinary academic and research programs.

The *Telecommunications Center* has established the University as a world leader in telecommunications technology and has enhanced OSU's ability to disseminate research results.

Major research affiliations exist with the National Center for Groundwater Research, Oak Ridge Associated Universities and National Laboratories, and the Oklahoma Medical Research Foundation. Research facilities exist within each of the academic colleges. Well-equipped laboratories, teaching and diagnostic facilities, and various resource centers provide an excellent environment for creative scholarly research.

At the College of Osteopathic Medicine in *biomedical research*, one of the largest areas of focus is in the area of neurosciences with projects ongoing in the areas of artificial vision, pain perception and mechanisms of actions of neural acting drugs. Work in this area also includes projects on Alzheimer's and Parkinson's diseases and the modulation of cellular immune responses by drugs of abuse.

Other areas of interest include arthritis, alcoholism/alcohol metabolism, reproductive endocrinology, kidney physiology and pathogenic free-living amoebae in Oklahoma waters. Additionally, an Aviation Medicine Research and Training Facility is currently under construction that will house multi-person hypo-and hyperbaric chambers used to study the effects of high altitudes on human physiology or the uses of hyperbarics in the treatment of several diseases such as burns, cancer and diabetes.

In *clinical research*, the College sponsors a variety of clinical research programs through its Department of Psychiatry and Behavioral Sciences and the Oklahoma Area Health Education Center. Included are a laboratory and field study on psychological factors in cardiovascular disease, effects of compliance to home self breast exams, prevention of alcoholism, drug abuse, suicide, type II diabetes and a computerized home treatment system for patients recovering from traumatic brain injuries.

University Research Council. The University Research Council operates to assure proper consideration of research projects that are multidisciplinary in nature and to provide a mechanism for consideration of administrative problems and policies. The Council serves as an advisory group on all research matters for the president of the University. This Council is composed of the vice-president for research, a representative of the Faculty Council, a representative from Sigma Xi, the director of Grants and Contracts Financial Administration, the director of Computing and Information Services, the associate project director of EPSCOR, the dean of libraries, the director of Federal Relations, and the research directors of the various colleges.

Accreditation

Oklahoma State University is accredited by the Higher Learning Commission NCA, a commission of the North Central Association of Colleges and Schools. Programs within the colleges are also accredited by other agencies. (The NCA may be reached at 30 N. LaSalle Street, Suite 2400, Chicago, IL 60601, phone (800) 621-7440. The Internet address is: www.ncahigherlearningcommission.org.)

In the *College of Agricultural Sciences and Natural Resources*, the forestry program is accredited by the Society of American Foresters. The landscape architecture program (Bachelor of Landscape Architecture) is accredited by the American Society of Landscape Architects. The landscape contracting program is certified by the Association of Landscape Contractors of America. In

addition, the College's teacher education program in agricultural education is accredited by the Oklahoma State Department of Education, and the Oklahoma State Department of Vocational-Technical Education.

In the *College of Arts and Sciences*, the medical technology program is accredited by the National Accrediting Association of Clinical Laboratory Science; the chemistry program is accredited by the American Chemical Society; the Ph.D. program in history is accredited by the American Historical Association; the School of Journalism and Broadcasting as well as the programs in advertising, broadcast journalism, news editorial, and public relations are accredited by the Accrediting Council on Education for Journalism and Mass Communications; the music program is accredited by the National Association of Schools of Music, the theater department by the National Association of Schools of Theater; and the public administration program in the Department of Political Science is accredited by the National Association of Schools of Public Administration. In the Department of Psychology, the doctoral program in clinical psychology is accredited by the American Psychological Association. The communication sciences and disorders program is accredited by the American Speech-Language-Hearing Association and the Oklahoma Speech-Hearing Association.

All programs in the *College of Business Administration* are fully accredited by the American Assembly of Collegiate Schools of Business (AACSB)—the International Association for Management Education. The School of Accounting has separate accreditation by this body.

In the *College of Education*, the aviation programs are accredited by the Federal Aviation Administration. OSU was the first university in Oklahoma with a program that received this designation. The counseling psychology and school psychology Ph.D. programs are accredited by the American Psychological Association. The leisure studies program is accredited by the National Recreation and Park Association and the American Association for Leisure and Recreation, with accredited options in leisure service management and therapeutic recreation. All professional education programs are accredited by the National Council for Accreditation of Teacher Education, the Oklahoma State Board of Education and the North Central Association of Colleges and Schools. Technical and industrial education is accredited by the Oklahoma State Department of Vocational-Technical Education.

Research Centers

Agronomy Research Station	Rural Route, Perkins, OK 74059	547-2385
Caddo Research Station	P.O. Box 42, Fort Cobb, OK 73038	643-2501
Eastern Research Station	Rt. 1, Box 65, Haskell, OK 74436	918-482-3822
Irrigation Research Station	Route 1, Box 15, Altus, OK 73521	482-3459
Kiamichi Forestry Research Station	Rt. 1, Box 228, Idabel, OK 74745	286-5175
Marvin Klemme Research Station	RR 1, Bessie, OK 73622	331-8171
North Central Research Station	Box 141, Lahoma, OK 73754	796-2447
Oklahoma Fruit Research Station	Rt 2, Box 1030, Perkins, OK 74059	547-2672
Oklahoma Pecan Research Station	Sparks, OK 74869 Send mail to Perkins	547-2672
Oklahoma Vegetable Research Station	13711 S. Mingo Rd, Bixby, OK 74008	918-369-2441
Panhandle Research Station	Rt. 1, Box 86M, Goodwell, OK 73939	918-369-2441
Sandyland Research Station	Mangum, OK 73554 Send mail to Altus	482-3459
South Central Research Station	Rt. 3, Box 9, Chickasha, OK 73018	224-4476
Southwest Agronomy Research Station	Tipton, OK 73570 Send mail to Altus	482-3459
U.S. Southern Great Plains Field Station	2000 18th St., Woodward, OK 73801	256-7449
Wes Watkins Agricultural Research & Extension Center	Box 128, Lane, OK 74555	889-7343
Agricultural Experiment Station	139 Agricultural Hall	744-5398
Agronomy Research Station	Rt. 5, Box 150, Stillwater, OK 74075	624-7036
Center for Aerospace Education Services Project	300 North Cordell	744-7015
Center for Applications of Remote Sensing	213 Scott	744-5178
Center for Environmental Education	408 Classroom Building	744-7233
Center for International Trade Development	204 Center for Int'l Trade Development	744-7693
Center for Laser & Photonics Research	413 Noble Research Center	744-6575
Center for Local Government Technology	308 Center for Int'l Trade Development	744-6049
Center for Sensors and Sensor Technologies	151 Physical Sciences II	744-3726
Crystal Growth Laboratory	145 Physical Science	744-5796
Ecotoxicology Research Laboratory	426 Life Science West	744-5551
Educational Technology Center	002 Willard Hall	744-7124
Electron Microscopy Laboratory	020 Veterinary Medicine	744-6765
Electronics Laboratory	398 Cordell South	744-5716
Engineering Energy Laboratory	216 Engineering South	744-5157
Environmental Institute	003 Life Science East	744-9994
Human Nutrition Center	425 Human Environmental Sciences	744-5040
Human Resources Development Center	204 Willard	744-6275
Industrial Assessment Center	322 Engineering North	744-6055
Manufacturing Processes and Materials Center	1724 W. Tyler, Stillwater, OK 74074	744-7375
Mass Spectrometry Laboratory	025 Physical Science	744-5937
Math and Reading Center	102 Willard	744-7119
Micro Raman Facility	145 Physical Science	744-5807
NMR400 MHz Laboratory	013 Physical Science	744-7999
NMR Oklahoma Statewide Shared Facility	005 Physical Science	744-5394
NMR Solids Laboratory	005 Physical Science	744-5934
NMR Solutions Laboratory	012 Physical Science	744-5950
Noble Research Center for Agriculture and Renewable Natural Resources	139 Agricultural Hall	744-5398
Oklahoma Center for Integrated Design and Manufacturing	203 Engineering North	744-6991
Plant Disease Diagnostic Laboratory	110 Noble Research Center	744-5643
Real-Time Distributed Systems Lab	413 Engineering South	744-5900
Recombinant DNA/Protein Resource Facility	349 Noble Research Center	744-9327
University Center for Energy Research	003 Life Science East	744-9996
University Center for Water Research	003 Life Science East	744-9996
Veterinary Medical Research Program	308 Veterinary Medicine	744-6663
Veterinary Research Station	139 Agricultural Hall	744-5398
Web Handling Research Center	1724 W. Tyler, Stillwater, OK 74074	744-7375

In the *College of Engineering, Architecture and Technology*, bachelor's degree programs are accredited by nationally recognized accreditation organizations. Programs in aerospace engineering (an option in mechanical engineering), architectural engineering, biosystems engineering, chemical engineering, civil engineering, electrical engineering, industrial engineering and management, and mechanical engineering are accredited by the Engineering Accreditation Commission (EAC) of the Accreditation Board for Engineering and Technology, Inc. (ABET). Programs in construction management technology, electronics technology, fire protection and safety technology, and mechanical engineering technology are accredited by the Technology Accreditation Commission (TAC) of the Accreditation Board for Engineering and Technology, Inc. (ABET). The program in architecture is accredited by the National Architectural Accrediting Board (NAAB).

Programs culminating in a B.S. in the *College of Human Environmental Sciences* are accredited by specialized agencies. The Foundation for Interior Design Education Research (FIDER) has accredited the undergraduate interior design program. The pre-production and the production management apparel curricula has received approval from the American Apparel Manufacturer's Association (AAMA). The Child Development Laboratory is licensed by the state of Oklahoma Department of Human Services (DHS) and has received a Two Star Differential Quality Certification from DHS. The Child Development Lab is also accredited by the accrediting branch of the National Association for the Education of Young Children (NAEYC). Program approval has been granted to the early childhood education program by the Oklahoma State Board of Education. The American Association of Marriage and Family Therapists (AAMFT) has accredited the master's program in marriage and family therapy. The commission on Accreditation/Approval for Dietetics Education (CAADE) of the American Dietetic Association has approved the Didactic Programming Dietetics (DPD) and accredited the post-baccalaureate Dietetic Internship Program (DI). The School of Hotel and Restaurant Administration is accredited by the Accreditation Commission for Programs in Hospitality Administration (ACPHA).

The *College of Veterinary Medicine* is fully accredited by the American Veterinary Medical Association. The Oklahoma Animal Disease Diagnostic Laboratory is accredited by the American Association of Veterinary Laboratory Diagnosticians and the Boren Veterinary Medical Teaching Hospital is accredited by the

American Animal Hospital Association.

Programs at OSU's branch campuses have also received accreditation from national agencies. The OSU College of Osteopathic Medicine is accredited by the Bureau of Professional Education of the American Osteopathic Association.

OSU-Oklahoma City is accredited by the Commission on Institutions of Higher Education of the North Central Association of Colleges and Schools. In addition, other programs are accredited or certified by the following institutions: Oklahoma Drug and Alcohol Professional Counselors Association, National Association for the Education of Young Children, Rehabilitative Services for Deaf and Hearing Impaired, State Health Department for Emergency Medical Technicians, Council on Law Enforcement Education and Training, National League for Nursing, Oklahoma Board of Nursing Accreditation Commission, and American Veterinary Medical Association.

OSU-Okmulgee is accredited by the Commission on Institutions of Higher Education of the North Central Association of Colleges and Schools. In addition, programs in automotive service technology and automotive body technology are nationally certified by the National Automotive Technicians Education Foundation, Inc. (NATEF). The dietetic technology program is accredited by the American Dietetic Association.

Refer to the appropriate college sections in the *Catalog* for further information on accreditation of specific programs.

Services at OSU

Library

The Oklahoma State University Library contains more than 5.5 million books, documents, and microforms, and about 17,000 serials. The open-stack arrangement of books and periodicals and the computer-assisted literature search and retrieval system support the on-going academic and research programs. The library contains a complete set of U.S. patents and is a regional depository of the federal government. Graduate students are entitled to a 120 day check-out period for books, and can use the interlibrary services.

Computing and Information Services

Computing and Information Services (CIS) is the central provider of computing, data networking, and telephone services for Oklahoma State University. CIS also

provides a variety of other important services to the campus including computer training, publications, programming support for institutional information systems, desktop computing support on site, and a comprehensive Help Desk.

The CIS Help Desk, serving more than 4,000 customers each month, provides diagnostic support and remedial assistance by phone, by electronic mail at helpdesk@okstate.edu, or in person at 113 Math Sciences.

All OSU students are given computer access and electronic mail upon enrollment. OSU's extensive data communications network provides interfaces to OneNet, MIDnet, the Internet, and the World Wide Web.

CIS supports eight remote computing facilities in various locations around campus with more than 400 microcomputers. A SUN Workstation cluster is located in 113 Engineering South.

The central mainframe computer at OSU is an IBM 9672-R32 Enterprise Server operating MVS/ESA and VM/ESA. Two time-sharing systems, TSO and CMS, are available on the mainframe. CIS also has a DEC System 3000-600 VMS and a DEC 2100A-4/275 RISC DIGITAL UNIX machine.

Additional information about CIS and computing at Oklahoma State University can be found on the Internet (home.okstate.edu). It is updated frequently with timely announcements.

Living Accommodations

From high-rise residence halls to single-dwelling apartments, OSU has all types of housing to meet many preferences. Wentz residence hall is designated for students needing year round housing (12 months). This 10-story air-conditioned building offers single and double occupancy, with priority given to single graduate students. Wentz also offers room computer network access. Optional meal plans are offered in neighboring cafeterias. Other amenities include an open visitation policy, extensive study space and parking adjacent to the hall.

University Apartments are available primarily to married and graduate students and on a limited basis to juniors and seniors. The apartment complex features two-bedroom units. To be eligible, the student must be a full-time student (nine credit hours per semester) or be enrolled in six credit hours and be employed by the university 50 percent of the time.

To apply for either housing service, an application and deposit must be filed with the appropriate office. For further

information, contact the Office of Residential Life or University Apartments. Early application is suggested.

Students with Children

Information on child care in the Stillwater community is available at the following locations on campus:

Family Resource Center—719 N. Walnut

Nontraditional Student Services—060

Student Union, Marie Basler, *Coordinator*

Adult Student Organization—045 Student Union

Health Care

Every student enrolled at OSU is eligible for health care at the University Health Center. Four agencies serve the University community to provide a wide range of mental health services. Low-cost life and health insurance is also available.

Graduate Assistants and Associates Health Insurance

Graduate assistants and associates are eligible for health insurance through OSU if they meet the following criteria:

Employed in a GA/TA/RA/ position throughout the fall and spring semesters at least 10 hours per week.

Enrolled in six graduate credit hours (six hours for the fall and spring semesters, three hours for the summer).

The University provides for the student's coverage on a semester-by-semester basis. Insurance coverage is under the Legion Insurance policy administered by Academic Risk Management. Information on the policy is available on the Internet (www.academicrisk.com), at the Graduate College, or through University Health Services.

Recreation

Intellectual exercising involves complete development of the mind, body and spirit. Opportunities for students to use their free time include concerts, lectures, films, and other media forms. Many student organizations function to enhance the educational experience of the student. The Colvin Physical Education Center offers a wide variety of organized and informal recreational activities including intramural sports of many types.

The Student Union offers a host of programs and services. The facilities include a complete food service, a the-

ater, hotel, game room, lounges and meeting rooms, bookstores, diverse specialty shops, banking facilities and a travel agency.

Graduate and Professional Student Association

The goal of the Graduate and Professional Student Association (GPSA) is to improve all aspects of graduate education and graduate student life at OSU. The Association has representatives from each department offering a graduate degree program. Members are nominated by the department heads with membership conferred by the dean of the Graduate College. Each representative is appointed for a term of one year if the student is in good academic standing and is enrolled in at least two credit hours.

The GPSA also provides organizational funding as well as travel scholarships to graduate students to help defray costs incurred by attending and presenting at professional meetings. For more information consult the Internet site (www.okstate.edu/osu-orgs/gsa).

Financial Aid

Tuition and Fees

Refer to the section on "Costs."

Tuition Waiver Policy for Graduate Assistants and Spouses

The University will waive the nonresident portion of tuition for graduate assistants who are enrolled full-time and who are employed at least one-fourth time for the entire semester in research or instruction related to their degree programs.

The nonresident tuition for summer will be waived even if the student is not employed as a graduate assistant for that period if the student held an assistantship for the preceding spring semester.

A spouse of a nonresident student employed as a graduate assistant for at least one-quarter time, is also eligible for a nonresident tuition waiver.

Teaching and Research Assistantships

The University awards numerous teaching and research assistantships with competitive stipends. Fellowship

opportunities are available through several programs. Service expected and the number of hours of graduate work a student may take are governed by the terms of the appointment. Applications should be addressed to the head of the department in which the appointment is desired.

An offer of a teaching or research assistantship is a commitment by a department or school to provide financial support to admitted graduate students. Assistantships are an investment made by a school or department and are granted primarily to enable the student to pursue an advanced degree. Accepting an assistantship brings with it a professional obligation to fulfill all of the responsibilities associated with the assistantship assignment. Included in the professional obligation is the expectation that students who have accepted an assistantship will diligently pursue their degree to completion in the department or school providing the assistantship.

International students that 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. Also, if out-of-state and international students forfeit their graduate assistantships, they risk losing their out-of-state tuition waivers, as well as any health insurance coverage for graduate assistants provided by the University.

In-state Tuition Waiver Scholarships

This award is also referred to as the general fee waiver.

Eligibility: U.S. citizen or permanent resident; regular admission to a graduate degree program; cumulative grade-point average greater than 3.00.

Application: Successful completion of the Free Application for Federal Student Aid (FAFSA) annually (packet available in Office of Student Financial Aid, 119 Student Union); apply directly to academic departments.

Award: Varies; awards granted by semester.

Deadline: Contact department for deadline.

OSU Foundation Graduate Fellowships

Eligibility: Grade-point average greater than 3.50; acceptance into a graduate degree program; no prior work completed on the particular degree being sought.

Application: Nominations are made by the student's department head.

Award: Variable.

Deadline: Variable.

Oklahoma Tuition Aid Grant (Need Based)

Eligibility: Oklahoma resident; enrolled in a graduate degree program; making satisfactory progress toward a degree.

Application: Successful completion of the Free Application for Federal Student Aid (FAFSA). Grants administered and awarded by Oklahoma State Regents for Higher Education. An information packet is available in the Financial Aid office.

Award: Varies according to need.

Deadline: Priority deadline is February 1 for consideration for the subsequent fall semester.

Social Justice Tuition Waivers

As part of a social justice policy enacted by the Oklahoma State Regents for Higher Education, minority nonresident graduate students are eligible for a waiver of their nonresident tuition. Eligible applicants should contact the associate dean in the Graduate College prior to the beginning of each semester.

Presidential Fellowships for Water, Energy and the Environment

These awards are offered for doctoral level study and research in the areas of water resources, energy resources and environmental issues. Focus areas include, but are not limited to: resource development, production, use and management; biodiversity; innovative technology development; risk analysis and management; policy development and analysis; pollution prevention, assessment, reduction and clean-up. Current stipends are \$19,200 annually and may continue up to three years.

To receive additional information concerning the fellowship program, contact the Environmental Institute, 003 Life Science East, Oklahoma State University, Stillwater, OK 74078 or on the Internet (<http://environ.okstate.edu>).

Miscellaneous Sources of Financial Aid

1. Electronic data bases that may have information are:

Community of Science (COS), databases of research information,

including funding opportunities. COS can be accessed via the Internet (<http://www.cos.com>).

Federal Information Exchange, Inc. (FEDIX), an on-line data base of government information for colleges, universities and other organizations. FEDIX can be accessed via the Internet (<http://web.fie.com/>). Science and Technology Information System (STIS), an electronic dissemination system that provides fast, easy access to National Science Foundation information and publications. STIS can be accessed via the Internet (<http://www.nsf.gov>).

2. University and public libraries have information on federal, state and private sources of aid. Factors other than financial need are often taken into account.
3. Many companies and labor unions have programs to help defray the cost of advanced education for their employees or members of their families.
4. Students should check foundations, religious organizations, fraternities or sororities, town or city clubs, community and civic organizations such as the American Legion, 4-H Clubs, Kiwanis, Jaycees, Chamber of Commerce, and the Masonic Lodge.
5. Organizations connected with a student's field of interest often provide scholarships. These organizations may be listed in the U.S. Department of Labor's Occupational Outlook Handbook, or a student can often find out more about these by contacting faculty members in the major field.

Departmental Scholarships

These awards are controlled by specific departments or those which require nomination from the department on behalf of the student. Individual departments may know if particular awards or scholarships are available in the discipline.

National Fellowships

1. Fulbright—Contact 076 Student Union, 405-744-5459.
2. National Science Foundation—Contact Research Services, 001 Life Science East, 405-744-9991.

Oklahoma State University Loans

OSU provides opportunities for students who need financial assistance. These funds are available to students who meet the eligibility requirements of

the various programs and are making satisfactory progress in their college work. The Short-term Loan program provides up to a maximum of \$200 per semester for the purpose of meeting educationally-related expenses.

Additional information is available in the Office of Scholarships and Financial Aid in a data base program called FINDS. Additionally, the Research Services often has information on miscellaneous forms of financial aid. There is no centralized location for graduate student financial aid; therefore, the student should also contact the reference section of the library for information.

Student Employment

Career Services provides assistance to OSU students seeking part-time employment. Students are informed of job opportunities on campus and in the Stillwater community. Applications are available in 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.

Special Programs

Certification Programs

Oklahoma State University offers Oklahoma State Department of Education-approved post-bachelor's certification programs for school counselors, and reading specialists. Certification is also offered in speech and language pathology and audiology 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 in: elementary school principal; school superintendent; secondary school principal; school psychologist; and school counselor.

Inquiries concerning any aspect of the Teacher Education program should be addressed to the Office of Professional Education or the head of the department offering the program.

Off-campus Programs

Research and Graduate Education Center in Tulsa

Oklahoma State University offers graduate courses through the Research and Graduate Education Center (RGEC) in Tulsa. All courses offered by OSU faculty are considered resident credit for degrees granted by Oklahoma State University. Courses offered by the University of Oklahoma at the RGEC can be applied to OSU degree requirements as transfer credit.

The graduate and certification programs that Oklahoma State University offers through the RGEC are:

College of Arts and Sciences

M.S. in Computer Science

M.A. in English

Teaching English as a Second Language

College of Business Administration

M.S. in Accounting

Master of Business Administration

M.S. in Economics

M.S. in Management Information Systems/Accounting Information Systems

College of Education

M.S. in Applied Behavioral Studies
Gifted and Talented

M.S. in Counseling and Student Personnel

Community Counseling

Student Personnel Services

M.S. in Occupational and Adult Education

Adult and Continuing Education

Human Resources Development

M.S. in Teaching, Learning and Leadership

Curriculum and Leadership Studies

Elementary, Middle, Secondary, K-12 Education

Occupational Education Studies

Reading and Literacy

Special Education

M.S. in Trade and Industrial Education

Ed.D. in Educational Administration

Ed.D. in Higher Education

College of Engineering, Architecture and Technology

M.S. in Chemical Engineering

M.S. in Civil Engineering

Construction Engineering and Management

Environmental and Water Resource Engineering

Geotechnical Engineering

Transportation Engineering

M.S. in Electrical Engineering

M.S. in Engineering and Technology Management

M.S. in Environmental Engineering
M.S. in Industrial Engineering and Management
M.S. in Mechanical Engineering

Interdisciplinary

M.S. in Environmental Science
M.S. in Natural and Applied Sciences
Aviation and Space Sciences
M.S. in Telecommunications Management

Prior to enrollment in RGEC courses, students should secure approval from their advisers concerning the appropriateness of any courses relative to the degree objective.

Graduate Programs at the College of Osteopathic Medicine in Tulsa

Oklahoma State University offers two graduate programs through the College of Osteopathic Medicine (COM). Application and admission information is found in the COM section of this *Catalog*.

Biomedical Sciences. The Ph.D. program in biomedical sciences is an interdisciplinary program involving the basic biomedical science disciplines of anatomy, biochemistry, cell biology, microbiology, pharmacology and physiology. The program consists of core basic sciences medical courses, additional basic sciences graduate courses, research and a dissertation.

Forensic Sciences. The graduate program in forensic sciences is an interdisciplinary program with two options to explore the broad range of disciplines, key issues for management and special areas for research within the forensic sciences.

The Master of Forensic Sciences Administration (M.F.S.A.), for individuals with academic or professional experience in forensics-related fields, is designed to develop a broad understanding of the various disciplines along with a management perspective of organizational issues within the forensic sciences. This is a 36-hour non-research program; courses are primarily online.

The Master of Science in forensic sciences (M.S.) is for individuals wanting in-depth study in special areas of forensic sciences. The 39-hour program involves a research project. Most classes will be held on campus in Tulsa or Stillwater, with 18 hours of online courses required.

Off-campus Program in Engineering

A master's degree in engineering may be obtained with all course requirements

being met at off-campus centers of Oklahoma State University, the University of Tulsa, and the University of Oklahoma. At least one-half of the hours needed must consist of courses taught by Graduate Faculty members of Oklahoma State University. The remainder of the hours may be made up of transfer credits from the University of Oklahoma earned on campus or at its off-campus centers and/or the University of Tulsa, and a maximum of eight hours of transfer credits from other institutions with approved graduate programs. All other requirements of the regular master's degree, as outlined in the *Catalog*, must be met.

Such a master's degree has the same designations as the one earned on-campus, except that the transcript will show the wording "Off-campus."

Extension Credit

Courses offered through the extension mode are considered equivalent to courses offered through traditional formats. Any student wishing to enroll in a graduate-credit course offered through this format must make application for admission to the Graduate College at OSU.

Correspondence Credit

Oklahoma State University does not offer graduate level courses by correspondence and does not accept credit taken by correspondence toward an advanced degree.

Interdisciplinary Programs

Oklahoma State University has a series of multidisciplinary graduate programs designed to provide students with a breadth of knowledge that is not ordinarily found in traditional programs. Descriptions are given below of the following multidisciplinary programs:

- Agriculture
- Control Systems Engineering
- Engineering and Technology Management
- Environmental Science
- Food Science
- Management Information Systems/Accounting Information Systems
- Manufacturing Systems Engineering
- Natural and Applied Sciences with programs of study in
 - Aviation and Space Sciences
 - Gerontology
 - and Graduate Certificate

- Interdisciplinary Sciences
- Health Care Administration
- Natural Sciences
- Photonics (M.S.)
- Photonics (Ph.D.)
- Plant Science
- Telecommunications Management

Agriculture

The Master of Agriculture degree is designed for students interested in graduate professional training with a strongly applied research orientation. The degree is offered in the following areas of emphasis: agricultural economics, agricultural education, agronomy, animal science, entomology, forestry, horticulture and landscape architecture, and plant pathology. The purpose of this degree is to provide a program which will give additional specialization in technical fields as well as increased breadth of training.

Students who are interested in working toward the Ph.D. degree should follow the regular Master of Science degree program. This program will provide a greater breadth of study than the Master of Agriculture program. Emphasis will be given to practical application of the technical aspects of the discipline as well as discipline interrelationships. The principal focus, however, is on an applied research concept and a broader program than is normally available with the specialized research degree.

A baccalaureate degree in agriculture or a related field is required for admission. The candidate must meet requirements for acceptance into the Graduate College and be recommended by the departmental graduate committee responsible for the program.

Environmental Science

Director Edward T. Knobbe, Ph.D.

The environmental science program at Oklahoma State University emphasizes that an understanding of, and solution to, many environmental problems involves the application of skills and knowledge of more than one of the traditional disciplines. Graduate Faculty members from the agricultural, biological, physical, or social sciences, education and engineering join for the purpose of offering graduate programs at the master's and doctor's levels.

OSU has had nine decades of experience and development in the application of scientific knowledge to society's problems. Important resources for graduate students are campus research and learning institutes and laboratories, cooperative programs with public and private agencies, and off-campus

research and teaching facilities. Many of these are staffed by personnel drawn from more than one discipline, and many serve to address problems which are multidisciplinary or interdisciplinary in scope and solution. The environmental science degree programs at the University are designed to utilize these resources and serve students whose interests transcend the traditional demarcations of knowledge and whose goals include the broad understandings and skills obtained by crossing disciplinary lines in the classroom and laboratory.

Graduates from the environmental science program are expected to have skills and knowledge that are applicable to a wide range of research, management, and planning vocations. Government, industry, and private consulting firms offer employment opportunities for environmental science graduates.

Programs of Study. The breadth of offerings at Oklahoma State University affords flexibility to the student interested in specific aspects of the environment. A student can design a unique degree plan to target a particular focus area that meets his or her professional goals. The student's graduate committee assists in this process to help ensure focus, breadth, and quality of the degree plan. Areas of concentration span a variety of areas such as political science, geography, geology, civil and environmental engineering, recreation, forestry, toxicology, biology, chemistry, agronomy, and agriculture. The flexibility of this program allows the student to focus on an environmental topic not normally addressed by a single discipline.

The Master of Science Degree. To obtain the M.S. degree in environmental science, a student must complete a 12-hour core curriculum consisting of an environmental problem analysis class (ENVIR 5400), an advanced environmental studies course (ENVIR 5300), and one course each in social science and physical science. A minimum of 18 additional credit hours are selected by the student and his or her committee and adviser. A thesis completes this 36-hour degree program. Specific requirements for the master's degree can be obtained from the program coordinator.

Environmental management (EM) is offered as a specialization within the environmental science M.S. degree program. EM track students complete a 36-credit-hour program involving 33 hours of course work and a three hour capstone internship (ENVR 5600). Of the 33 hours of course work, three hours of ENVIR 5300, three hours of practicum (ENVR 5500), and 27 hours in a selected focus area must be completed. Currently, the EM track offers focused study in the

following areas: decision; technical; project; policy; toxicology and risk assessment; and disaster and emergency management.

The Doctor of Philosophy Degree. To obtain the Ph.D. degree in environmental science, a student must propose and undertake a minimum of a 60-hour plan of study. The plan of study must include a minimum of 36 credit hours of course work consisting of six hours of a skill component of three credit hours, a doctoral seminar and 27 credit hours that are selected by the student and his or her committee that reflect the biological, social and physical aspects of the concentration area. In addition, this course work will include ENVIR 5400 and ENVIR 5300 as designated in the M.S. degree requirements. Research and courses should reflect the student's professional goals. A dissertation is required and consists of a minimum of 15 credit hours. Specific requirements for the doctoral degree can be obtained from the program coordinator.

Environmental management is offered as a specialization within the environmental science Ph.D. degree program. EM track students complete a 60 hour program beyond the M.S. degree, involving a minimum of 36 hours of course work, three hours of ENVR 5300, two hours of ENVR 6200 Seminar, three hours of practicum (ENVR 6500) and six hours of capstone internship (ENVR 6600). This also includes six hours of skill component, three hours of technical core, three hours of social core, and three hours of trans core. A dissertation is required with a minimum of 15 research credit hours. Currently, the EM track offers focused study in the following areas: decision; technical; project; policy; toxicology and risk assessment; and disaster and emergency management.

Admission. To participate in the environmental science program, a student must first make application to the Graduate College. Application materials specific to the environmental science program include a statement of academic, research and professional goals, three letters of recommendation, complete transcripts, and a Graduate Record Exam (GRE) report. A TOEFL score of at least 575 is required of all international students.

All applications to environmental science graduate programs should be submitted at least 60 days before the opening of the semester for which enrollment is first intended. International students should supply all application materials by March 1 for fall enrollment, and July 1 for spring enrollment. The Graduate College will provide the necessary forms.

Financial Assistance. Fee waiver scholarships are available through the Graduate College for environmental science students. Such scholarships are available for those who can qualify as Oklahoma residents. Priority is given to minority students, and those who can demonstrate financial need. To be considered, a FAFSA must be completed.

Graduate research assistantships and other funding opportunities are often available through faculty members participating in the environmental science program or through one of the several research institutions or centers on campus. The initial application should specify an interest in an assistantship.

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

Food Science

Program Coordinator Gerald Horn, Ph.D.

The following departments participate in the food science program: Agricultural Economics, Agronomy, Animal Science, Biochemistry and Molecular Biology, Biosystems and Agricultural Engineering, Horticulture, Microbiology and Molecular Genetics, and Nutritional Sciences.

Food science is an interdisciplinary graduate program designed to provide an opportunity for students to acquire basic knowledge of food industry encompassing the biological and physical sciences. The increasing complexity of the problems involved in the production, processing, and utilization of food demands increased 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 and quality assurance facilities of industry, universities and the federal government.

Admission Requirements. Admission to either the Master of Science or Doctor of Philosophy degree programs 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 recognized by the student's graduate committee. A student enrolling in a degree program must have been accepted by an adviser prior to official admission.

Manufacturing Systems Engineering

Program Coordinator John W. Nazemetz, Ph.D.

This interdisciplinary master's degree is designed to address the needs of manufacturing managers, particularly those in small- to medium-size firms, in all aspects of manufacturing systems, including management as well as the hardware aspects of manufacturing.

Jointly sponsored by the schools of Electrical and Computer Engineering, Industrial Engineering and Management, and Mechanical and Aerospace Engineering, this program produces graduates capable of direct contributions in the design, selection, and implementation of up-to-date computerized manufacturing systems.

To pursue this degree a student enrolls in one of the three schools listed above and is advised by a faculty member in that school. The student's advisory committee is composed of members from each of the three schools. For more information students should contact the program coordinator in the School of Industrial Engineering and Management.

Natural and Applied Sciences

Aviation and Space Sciences
Program Coordinator Steve Marks, Ed.D.

Gerontology
Program Coordinator Joe Weber, Ph.D.

Interdisciplinary Sciences
Program Coordinator Timothy J. Pettibone, Ph.D.

Health Care Administration
Program Coordinator Mike Branson, Ph.D.

Natural Sciences
Program Coordinator Timothy J. Pettibone, Ph.D.

The Master of Science in natural and applied sciences consists of four programs, each with different specializations designed to address the needs of students with specific interests. The four are aviation and space sciences, gerontology, interdisciplinary sciences and natural sciences. Within interdisciplinary sciences there is a well-defined specialization in health care administration. For detailed information on these programs of study, students should contact the program coordinators. Bulletins describing the requirements of each program are also available from the Graduate College.

Programs of Study. *Aviation and Space Sciences.* Students will take a minimum of 11 credit hours of core courses from research, organizational theory, and administration and management. The remaining courses, to total a minimum of 32 credit hours, will come from the multidisciplinary course list or additional courses from the core list. Other courses may substitute upon approval from the advisory committee. Students may select the research component—thesis, report, or creative component—with approval of the advisory committee. Six credit hours are allowed for the thesis option and two credit hours are allowed for the research report. Credit hours allowed for the creative component varies.

Gerontology. In addition to the general admission criteria, students in gerontology must meet three conditions to be eligible for admission:

1. Overall grade-point average of at least 3.00;
2. GRE score with a 900 minimum score (total verbal and quantitative) or an MAT score of at least 35.

Gerontology offers two plans to obtain a master's degree. The first plan requires 36 credit hours, including a creative component and/or an internship. The second plan includes a thesis and requires a minimum of 33 credit hours, including six hours for the thesis. The student's advisory committee will assist the student in selecting the courses for the plan of study which best address the student's professional and personal goals.

Gerontology Graduate Certificate. The graduate certificate in gerontology, approved by the Oklahoma State Regents for Higher Education, will provide documentation that students have completed a program of instruction and educational experiences in the field of gerontology at the graduate level.

Admission into the program is based on the following criteria:

1. Applicants must have met the University's graduate admission requirements and be currently pursuing a master's or doctoral degree from one of the academic departments at OSU.
2. A student who has already completed a master's or doctoral degree from Oklahoma State University or another accredited institution would also be eligible to complete the gerontology certificate requirements.
3. Students must complete a minimum of 21 graduate credit hours involving at least six different courses of formal instruction, in addition to three credit hours of creative or basic applied research activities related to aging populations.

Upon satisfactory completion of the program, students will receive a certificate and a notation on their transcripts. For more information, contact the Graduate College, 202 Whitehurst, or the Department of Family Relations and Child Development, 242 Human Environmental Sciences.

Interdisciplinary Sciences. This program is for students who wish to increase their competence in a particular thematic area by taking a series of courses in several disciplines. This multidisciplinary approach provides educational opportunities leading to a variety of careers.

Interdisciplinary sciences consists of no fewer than three separate fields of study with at least six hours in each field. No more than 15 hours may be taken in any one area. The advisory committee will assist the student in formulating the plan of study.

Health Care Administration. This specialization within interdisciplinary sciences is designed for individuals who seek to pursue a career in the field of health care management. The 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.

Natural Sciences. This program is for science teachers and other individuals who desire a broader program than that offered in departmental programs. The goal of the program is to provide the student with a breadth of training in science and related areas.

To enter the program, the student should have a minimum of 30 credit hours of science, with biological, physical, and earth sciences represented. 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.

Particular courses are not specified for the degree; the student's advisory committee assists the student in selecting appropriate courses. However, not more than two-thirds of the courses for the degree may be taken in any one of the areas of biological, physical, or earth sciences.

Financial Assistance. In-state fee waiver scholarships are available on a limited basis for eligible students. Interested students should contact the program director in the Graduate College. Eligibility criteria include Oklahoma residency,

enrollment in residence credit hours, admission into the program, and successful completion of the FAFSA form for the academic year in which the student is seeking aid. The FAFSA packets are available in the Office of Student Financial Aid, 119 Student Union.

Photonics

Program Coordinator Paul Westhaus, Ph.D.

An interdisciplinary program in photonics has been established at Oklahoma State University by the academic departments of Chemistry, Electrical and Computer Engineering, and Physics, together with the Center for Laser and Photonics Research. Students may pursue a Master of Science (M.S.) degree in photonics with specialization in chemistry, electrical engineering, physics or biophotonics. A multidisciplinary program of course work is tailored to the goals of each individual student as he or she is mentored by a chosen faculty member from the department of specialization and guided by the advisory committee.

The faculty emphasize both basic and applied interdisciplinary research. To accomplish this in addition to a myriad of state-of-the-art laser systems, the OSU campus houses a molecular beam epitaxial (MBE) growth and analysis facility and unique optoelectronic THz beam systems. Current research programs include optical fiber communications and optical circuits for computing as well as high speed optoelectronic applications to fundamental and applied problems in the THz frequency range. Other investigations center on the preparation and characterization of specialty-doped insulators and semiconductors for use as lasing materials, non-linear optical crystals for data storage and holographic applications, and photonic-based chemical, physical, and biochemical environmental sensors. Research programs in the biomedical applications of lasers at both the basic research and clinical application levels seek to understand the interaction of light with biological materials at the tissue, cellular and molecular levels.

Photonics research programs in the three academic departments and the Center for Laser and Photonics Research are funded by grants from the National Science Foundation (NSF), Department of Defense (DoD), Department of Energy (DoE), and the National Institutes of Health (NIH). In addition to funding from federal agencies, the Center for Laser and Photonics Research is supported by industries such as Eagle-Picher Industries, 3M, and Worldcom, as

well as medical research facilities and private foundations including Presbyterian Health Foundation and the Kerr Foundation. This broad support enables the Center to remain on the leading edge of research in critical new laser and photonics technologies as they relate to basic science, industry and medicine.

Students also benefit from these strong research collaborations with the industrial and medical communities. Most directly, one photonics degree option requires the active involvement of the student in faculty-guided original research. With such an option the student works side-by-side with an advisor in pushing back the frontiers of knowledge of photonic processes. Other non-thesis options require a report or some other creative component. Those students choosing the non-thesis options (see the requirements below) still indirectly benefit through their course work taught by faculty actively engaged in these ongoing discoveries.

Program Options and Degree Requirements. There are three options leading to the M.S. degree in Photonics. All options require a minimum of 24 credit hours of course work, with at least one course taken outside the student's specialization. Beyond this, the first (30-credit-hour) option requires six credit hours of original research culminating in the successful defense of a master's thesis. The second (32-credit-hour) option requires six additional credit hours of course work and a two credit hour report. The third (36-credit-hour) option requires 12 additional credit hours of course work with a creative component. For the second and third options at least two courses must be from outside the field of specialization; an oral presentation of the report or the creative component by the student must be acceptable to the advisory committee.

A detailed plan of study specific to the specialization and option chosen is formulated by the student in consultation with the advisory committee.

Admission Requirements. Although the photonics program is administered through the Graduate College with admission recommended by the Photonics Program Committee, the student will be a member of one of the three specialization departments and choose an adviser and form an advisory committee from that department. Also, teaching assistantships are administered through each particular department. Admission to the photonics program (by the Program Committee) and the awarding of financial support (by the departments) are done independently.

Applications should include:

- a. a cover letter indicating the department of specialization and whether the student wishes to be considered by that department for a fellowship or teaching assistantship;
- b. a personal statement of interests and goals, noting especially how they relate to the degree in photonics;
- c. transcripts of all previous academic work (an unofficial transcript will suffice for the application; official transcripts are required by the Graduate College after admission.);
- d. the names of three persons who have been requested to submit letters of reference to the address below. The student is expected to contact the references.

Financial Aid. A student pursuing an original research project may receive support as a research assistant (RA) through grants and contracts to the individual faculty member who serves as the adviser. Other students, even as they pursue research, and those students pursuing the non-thesis option may be supported as teaching assistants (TAs) in academic departments of their specialization. Outstanding students may be selected for fellowship awards available in the respective departments.

Additional information may be obtained from the Department of Physics and on the Internet (<http://www.okstate.edu/clpr>).

Plant Science

Program Coordinator Arron Guenzi, Ph.D.

Solutions to current problems in plant science often require integration of knowledge from a number of disciplines. The plant science program at Oklahoma State University provides the opportunity for the exceptional Doctor of Philosophy student to develop an academic and research program tailored to his or her individual interests and needs. Faculty participating in this program come from the departments of Agronomy, Biochemistry and Molecular Biology, Botany, Entomology, Forestry, Horticulture and Landscape Architecture, Microbiology and Molecular Genetics, and Plant Pathology. The multidisciplinary nature of this program allows students to experience many facets of plant science and affords them the flexibility to seek employment in a variety of settings in the plant sciences. Students, in consultation with their graduate committees, develop a program in one of three specialization areas (cellular and molecular, organismal, or ecological), but are expected to develop a sound foundation across all disciplines of plant study.

Admission Requirements. Application for admission must first be made to the Graduate College. Additional information required by the plant science steering committee includes a statement defining plant science interests, a resume, three letters of reference, an abstract of the Master of Science thesis (if applicable), GRE scores (the Advanced Biology GRE is also desirable), and a minimum TOEFL of 570 (if applicable). A student must be accepted by a faculty adviser prior to official admission.

Financial Assistance. Students seeking financial assistance should inquire directly to the department(s) of interest within the plant science program.

Steering Committee

Arron C. Guenzi, Plant and Soil Sciences

Biao Ding, Botany

Andrew J. Mort, Biochemistry and
Molecular Biology

Jack W. Dillwith, Entomology

Stephen W. Hallgren, Forestry

Jeffrey Anderson, Horticulture and
Landscape Architecture

David H. Demezas, Microbiology and
Molecular Genetics

Jacqueline Fletcher, Plant Pathology

Telecommunications Management

Program Director Mark Weiser,
Ph.D.

In response to industry's need for skilled and knowledgeable telecommunications management graduates, Oklahoma State University offers a Master of Science degree in telecommunications management. This program is offered through traditional means to on-campus students as well as via distance learning technologies to students at remote locations.

The telecommunications management program draws on the combined expertise of three OSU colleges—the College of Arts and Sciences, the College of Business Administration, and the College of Engineering, Architecture and Technology. As a result, the telecommunications management student will have a traditional home department to achieve a depth of knowledge in one discipline, while developing broad knowledge in business, technical and communication disciplines.

This program prepares graduates for managing the telecommunications technologies as well as managing in a competitive environment with telecommunications systems. The graduates of this program are likely to be employed by providers or users of telecommunications technologies.

Telecommunications Management Curriculum

The program curriculum consists of 35 credit hours, including six core courses, one laboratory, one practicum, and four electives. Students may choose either a part-time or full-time sequence. Full-time students can complete the program in one and one-half years while part-time students may be able to complete it in two years.

Admission Requirements. Qualified graduates of colleges and universities of recognized standards are eligible to seek admission to the OSU Graduate College. Applicants must submit the completed application form to the Graduate College with official transcripts of all academic work and degrees received.

In addition to the OSU Graduate College's standard requirements, the telecommunications management program admissions committee will review students' letters of recommendation, GMAT or GRE scores, previous academic performance, and telecommunications experience.

Program information can be accessed via the Internet (<http://www.mstm.okstate.edu>).

Particular attention should be given to timing and substantive requirements for matriculation, especially admission, the plan of study, residence, language proficiency, research and thesis or report, and graduation. The regulations are prescribed by the Graduate Faculty with the intent of assuring high-quality graduate programs and effective interaction of Graduate Faculty members and graduate students.

A request for waiver of any regulation must be made in writing to the dean of the Graduate College for presentation to the Graduate Faculty Council for action. Such a request must be approved by the major adviser. The student and the major adviser should present sufficient information to allow the Graduate Faculty Council to evaluate reasons for requesting a waiver and to make a decision concerning departure from normal Graduate College regulations.

Admission to the Graduate College

Qualified graduates of colleges and universities of recognized standing are eligible to seek admission to the Graduate College. Applicants must submit the completed application form to the Graduate College, with official transcripts of all academic work and degrees received.

1. The student should request all institutions previously attended to send two copies of the official transcript to the Graduate College, 202 Whitehurst, Oklahoma State University, Stillwater, OK 74078.
2. To be official, the transcript must show the complete scholastic record, bear the official seal of the institution, and be signed by the issuing officer.

To assure adequate time, application forms and transcripts should be received by the Graduate College at least 30 days prior to expected enrollment, or by department application deadline. The application fee must accompany the Application for Admission. *Transcripts and other documents become the property of Oklahoma State University.*

Standardized Test Scores

Many departments require standardized test scores, such as the Graduate Record Examination. Applicants must contact the appropriate department head for information regarding departmental requirements for these tests. (Refer to the table "Graduate Admission Requirements.")

General Regulations

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 Faculty Council.

Responsibilities

All graduate students are expected to read and to comply with the written regulations. The regulations presented in the Catalog may be supplemented by written departmental or program requirements available at departmental offices. Admission to a specific graduate program obligates the student to 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 degrees: master's, Doctor of Philosophy, Doctor of Education, and Specialist in Education.

International Student Admission

International applicants are expected to submit applications, financial affidavits, transcripts, and results of the Test of English as a Foreign Language (TOEFL) examination by March 1 for fall enrollment and by August 1 for spring enrollment.

TOEFL. As a condition of admission to regular graduate study at OSU, all persons for whom English is a second language are required to present a score of 550 (213 computer based) or above on the TOEFL regardless of the number of semesters or terms completed in other institutions of higher education, including OSU, or prior enrollment in English language programs. Some departments require a score above 550 (213 computer based). Students should contact the department for specific TOEFL requirements. Persons who present a TOEFL score of 500 (173 computer based) or above and who demonstrate unusual academic promise may be admitted to graduate study on probationary status, but the number of such persons will not exceed two percent of the regularly enrolled graduate student population of the previous fall semester.

Submission of the TOEFL score with the application is never waived.

English Proficiency Test for International Students. Before international students can complete their first enrollment, they are required to take the Test of English Language Proficiency (TELP). This test is required in addition to the TOEFL. It is administered on campus before each regular semester and summer session through University Testing and Evaluation (111 N. Murray). Students who do not score sufficiently high on the TELP are required to enroll in English 0003 to enhance their English skills. This class must be taken and completed during the first semester of graduate study at OSU. A waiver of this requirement can be granted to a student who:

1. has achieved on the TOEFL a score of 600 (250 computer based) or higher and a score of 5.0 or higher on the Test of Written English (TWE).

or

2. has completed two full-time semesters of study in an accredited United States college or university.

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 instructionally related capacity. Employment requires demonstrated proficiency on the Test of Spoken

English (TSE) as determined by the University. Other spoken English examinations are not acceptable as substitutes for the TSE. This test may be taken on campus or at any of the many testing sites provided by the Educational Testing Service. This test score is used as a condition of employment, not a condition for admission to the Graduate College.

International Teaching Assistant Program. Any international teaching assistant is required to participate in the international teaching assistant orientation and evaluation workshop offered at the beginning of the fall and spring semesters. Students must receive an evaluation of "pass" prior to teaching in the classroom. For further information, contact the Office of the Dean of the Graduate College, 202 Whitehurst.

Types of Admission

Oklahoma State University uses the 4.00 scale to calculate grade-point averages; that is, an "A" yields four points per credit hour, a "B" yields three points, a "C" yields two points, a "D" yields one point, and an "F" yields zero points. If an applicant's prior college or university uses a different scale, the grade-point average must be converted to the 4.00 scale to determine whether the applicant meets Oklahoma State University grade-point admission requirements for one of the types of admission. Therefore, all references to grade-point averages are based on a 4.00 scale. References to credit hours are to semester credit hours.

When the applicant's file is complete, the faculty in the department or program of the student's area of interest is asked to review the material and recommend an admission status to the dean of the Graduate College. The final decision for admission to the Graduate College is determined by the dean on the basis of the department's recommendations, prior academic performance of the applicant, and availability of space, facilities, and faculty advisers in the program. The decision is conveyed to the applicant by means of a letter. Admission to the Graduate College means only that the student will be permitted to enroll in courses through the Graduate College. It does not necessarily imply that the student has been or will be admitted to a program leading to an advanced degree or that the student will be able to obtain a graduate degree. Opportunities for receiving graduate credit and graduate degrees are dependent on the admission status granted to the student.

Unqualified Admission. Students planning to work toward a graduate degree in a recognized graduate program may be admitted without qualification provided

they meet all Graduate College and departmental requirements.

1. Admission to full graduate status in a degree program is contingent on the presentation of an undergraduate degree from an accredited college or university, an acceptable academic record, and the recommendation of the major department and the dean of the Graduate College.
2. If a student fails to provide proof of the receipt of an undergraduate degree or fails to remain in good standing academically, academic participation may be terminated or the status may be changed to probationary or unclassified.

Probation or Provisional Status. Applicants who are graduates of accredited colleges and universities and who have attained less than an acceptable grade-point average in all undergraduate work may be admitted provisionally or on probation on recommendation of the major department at Oklahoma State University and concurrence by the dean of the Graduate College. Alternatively, a student who has been in full graduate standing or special student status may be placed on probation or continued provisionally if academic performance in courses taken in graduate status at Oklahoma State University falls below a "B" average. Students with acceptable academic records but without the background necessary for a particular degree program may also be admitted provisionally. Students admitted provisionally or on a probationary basis may be granted full graduate standing after performing at an acceptable academic level. Failure to meet required academic levels while in a probationary status will result in dismissal from the Graduate College.

Special Student Status. An applicant may be admitted to the Graduate College as a special 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. *International students with an F-1 visa may not enroll as special students.*

1. A special student must meet all of the academic requirements described for unqualified admission except that he or she need not be admitted or recommended for admission by a department or program.
2. The student is responsible for filing a new application for admission to the Graduate College should he or she wish to become a degree candidate. The application will be evaluated by faculty of the department or program and the dean of the Graduate College to ascertain admissibility to the degree program.

3. As such work is not guided by a plan of study or approved by an adviser, no more than nine semester credit hours of course work taken while a special student may be used on a plan of study to meet requirements for a degree.
4. Special students are subject to the same academic regulations as those students admitted into degree programs.

Transfer of Graduate Credits

Transfer of graduate credits to the Graduate College is possible only when the student was formally admitted to the graduate college at another accredited institution and the course(s) was certified as graduate credit by that institution.

The work must be recommended by the adviser as a part of an approved plan of study. The acceptance of transferred work requires the recommendation of the student's advisory committee and approval by the dean of the Graduate College at the time a program of study is planned. A maximum of nine credit hours with a grade of "B" or better in each course can be accepted as transfer credits toward a master's degree. Doctoral students must complete at least 30 hours of their program at OSU. However, no more than nine hours may be transferred from institutions that do not grant doctoral degrees.

Departmental or Program Requirements

The General Regulations of the Graduate College are minimum requirements that must be met by all graduate students at OSU. Students are also subject to any additional requirements that are determined by their program of study. Students should always make sure to receive copies of specific program requirements by contacting the program office.

Readmission to the Graduate College

A prospective student must enroll for courses at OSU within a year after his or her admission date to retain active status. A graduate or prospective student who does not enroll within two years must reapply for admission. A student who interrupts enrollment for one year must re-apply for admission, or obtain approval from the department to continue admission, and will then be subject to the regulations in effect at the time of readmission. A student who interrupts enroll-

ment for greater than two years must re-apply for admission.

Audit

A student who does not wish to receive credit in a course may, with the approvals of the student's adviser and the instructor of the course concerned, attend the class strictly as a visitor. A student who applies to audit a course promises that he or she will not use the audit to avoid the rule against excessive hours, and that he or she will not petition or ask in any way for the privilege of taking an examination to obtain credit after he or she has audited the course. (Laboratory courses, private music lessons and art courses are not open for audit.)

If a student is already enrolled for credit in a course, but wishes to change to auditing that course, the student must officially drop the course (or, if appropriate, withdraw), at the time the student changes to audit.

A student who has established a permanent record at OSU may have the audited course recorded on his or her transcript with "AU" appearing in place of the grade. Not later than one week after the close of that semester, the student must present to the Office of the Registrar the instructor's copy of the audit form with a signed statement from the instructor, on the reverse side, that it is appropriate for the course to be recorded on the student's transcript. Any individual 65 years or older may audit a class at no charge.

Enrollment

Students with a bachelor's degree are expected to register in the Graduate College unless they want to obtain another bachelor's degree. If they register as an undergraduate, the courses taken cannot be given graduate credit at a later date.

Students in the Graduate College may enroll in a course which does not carry graduate credit or audit courses if such courses are recommended by an adviser and approved by the dean of the Graduate College.

Students will be permitted to enroll (late fee will be charged) or to add a course through the first week of a regular semester or third day of a summer session. For short courses, students will not be permitted to enroll after the first day of the course.

Enrollment Procedure

1. Enrollment forms (Trial Schedules) are available in the Graduate College.
2. Continuous graduate students have their Trial Schedule forms approved and signed by their departmental advisers. Special students have their Trial Schedule forms approved in the Graduate College prior to enrolling.
3. Students enrolling for the first time in graduate courses must have trial schedule forms signed by their advisers. The student brings the signed form to the Graduate College for approval.
4. Graduate students complete the enrollment process in the Sectioning Office located in 321 Student Union.

Phone-in Enrollment

Graduate students may enroll by telephone if they have been accepted into the Graduate College. Students must have no academic or financial holds on their enrollment and must have the required advance fee payment on file in the Office of the Bursar. Students may use the local number (405) 744-6368 or the toll-free number 1-800-227-GRAD.

Computer Enrollment

Continuing graduate students are eligible to enroll via the SIS web enrollment system. New and readmitted graduate students cannot enroll through the web. Complete instructions for computer self-enrollment are included in the Class Schedule book. Eligible students can add and drop courses on the web through the last date to add courses for a given semester.

Minimum and Maximum Hours of Enrollment

Any graduate student using the facilities and faculty resources of the University must be enrolled. Every graduate student is expected to satisfactorily complete no fewer than six semester credit hours during each 12-month period until the degree is awarded. Students who are involved in research throughout the year are expected to enroll each semester.

For a fall and spring semester, the total registration may not exceed 18 credit hours. Regardless of the number of hours taken, a student may not count more than 16 credit hours taken in the fall or spring semester toward a degree.

During the summer session, a student may not count toward a degree more than nine credit hours taken in any session during the eight-week summer session. No more than three credit hours

taken during the first summer session (intersession) may count toward a degree. 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.

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 from this institution. This regulation applies to faculty members in the schools of engineering holding the rank of assistant professor or above.

Enrollment Regulations for Graduate Assistants and Fellows. Graduate students employed by the University part-time may register only for the amount of credit recommended by the head of the major department and approved by the dean of the Graduate College. In general, students employed 20 hours per week may not register for more than 10 semester credit hours of course work for a semester and five hours during a summer session. Other employment will permit registration for an appropriate number of hours. Graduate students whose employment is such that results will be used for a thesis, however, may register for additional thesis credit as recommended by the research adviser and approved by the dean of the Graduate College.

Any graduate student holding an assistantship or fellowship must enroll in at least six resident semester credit hours during the fall and spring semesters and at least three resident semester credit hours for each summer session.

If a graduate assistant enrolls in more credit hours than allowed for percentage of time employed, a petition for excessive hours, available in the Graduate College, must be completed and returned to the Graduate College for approval.

Employment—Enrollment

	<i>Petition to take:</i>	
	<i>Fall/Spring</i>	<i>Summer</i>
100% or full time	more than 6 hours	more than 3 hours
75% or 3/4 time	more than 7 hours	more than 3 hours
60%	more than 8 hours	more than 4 hours
50% or 1/2 time	more than 10 hours	more than 5 hours
30–40%	more than 12 hours	more than 6 hours
25% or 1/4 time	more than 13 hours	more than 7 hours

Graduate Admission Requirements

Requirements are subject to departmental revision. 1 = Test is required, 2 = Test is recommended, 3 = GRE or Miller may be interchanged, with departmental consent, 4 = GRE or GMAT may be interchanged. Note: All applicants must submit references to department, (l.o.r. = letter of recommendation).

Major	Degree	GRE Gen Sub	GMAT	Miller Analogy (MAT)	Additional Requirements
Agricultural Sciences and Natural Resources					
Agricultural Economics	MS, PhD				No entrance exam.
Agricultural Education	MS, PhD				GRE or Miller.
Agriculture	MAG				See specific departmental section.
(Agricultural Economics, Agricultural Education, Agronomy, Animal Science, Entomology, Forest Resources, Horticulture & Landscape Architecture, & Plant Pathology)					
Animal Science	MS				No entrance exam.
Animal Breeding	PhD				No entrance exam.
Animal Nutrition	PhD				No entrance exam.
Biochemistry & Molecular Biology	MS, PhD	1	2		
Entomology	MS, PhD	1	2		
Forest Resources	MS	2			
Horticulture	MS	1			3 l.o.r.; stmt of interest area.
Plant Pathology	MS, PhD	1	2		No minimum score.
Plant & Soil Sciences	MS				No entrance exam.
Crop Science	PhD				No entrance exam; 3 l.o.r.; stmt of interest area.
Soil Science	PhD				No entrance exam.
Arts and Sciences					
Arts Management	MA				
Botany	MS	1	2		3 l.o.r.; stmt of intent.
Chemistry	MS, PhD	2	2	2	Placement exams.
Computer Science	MS PhD	1	1		PhD: 75 percentile quantitative section; 50 percentile advanced.
English	MA, PhD	1	1		MA: 3.00 GPA; BA in English or equivalent for TESL or Technical Writing; 2 l.o.r.; writing sample. PhD: 3.50 GPA; MA in English; 3 l.o.r.; writing sample.
Fire & Emergency Management Administration	MS				
Geography	MS	1			3.00 GPA; 3 l.o.r.
Geology	MS	2	2		
History	MA	1	1		3.00 GPA; 3 l.o.r.
	PhD	1	1		3.50 GPA; 3 l.o.r.
Mass Communications	MS		1		3.00 GPA; 3 l.o.r.; stmt of goals & purpose.
Mathematics	MS, PhD	2			
Microbiology, Cell & Molecular Biology	MS, PhD	1	2		3 l.o.r. & stmt of intent.
Pedagogy & Performance (Music)	MM				Audition, dept. application, 3.00 GPA.
Philosophy	MA	2			
Physics	MS, PhD	2	2		
Political Science	MA	1			See department admission requirements.
Psychology	MS PhD	1	1		Dept. application; 3 l.o.r.
Sociology	MS, PhD	1	2		See departmental admission requirements.
Statistics	MS, PhD				No entrance exam.
Wildlife & Fisheries Ecology	MS, PhD	1	1		Aptitude: MS-1000, PhD-1150. Advanced: MS-600, PhD-650.
Zoology	MS, PhD	1	1		Same as Wildlife and Fisheries Ecology.
Business Administration					
Accounting	MS			1	3.25 GPA; GMAT 500.
Business Administration	MBA			1	3 l.o.r. & an essay.
Business Administration (Accounting)	PhD			1	GMAT req., high GPA, 3 l.o.r.
(Finance)				1	3 l.o.r.
(Management)				1	3 l.o.r.
(Marketing)				1	3 l.o.r.
Economics	MS, PhD	1			3 l.o.r.
Management Information Systems	MS				
/Accounting Information Systems					

Major	Degree	GRE Gen Sub	GMAT	Miller Analogy (MAT)	Additional Requirements
Education					
Applied Behavioral Studies (Ed Psych, Ed Research, Gifted & Talented, Sch Psychometry)	MS	3		3	3 l.o.r.; career aspirations & goals stmt.
Applied Educational Studies	EdD	3		3	See specific dept.
Counseling & Student Personnel (Community Counseling, Elem Sch Counseling, Sec Sch Counseling, Student Personnel Service)	MS	3		3	3 l.o.r.; career aspirations & goals stmt.
Curriculum & Instruction (Curriculum/Supervision, ElemEd, Information/Communication, Reading Ed, Sec Ed)	EdD			1	Complete folder of info.
Education	EdS	3			
Educational Administration	EdD	3		3	
Educational Psychology (Counseling Psych, Ed Psych, Research & Evaluation, Sch Psych, Special Ed, Student Personnel Admin.)	PhD	1			4 l.o.r.; career aspirations & goals stmt; proof of written work.
Health, P.E. & Leisure	MS	3		3	
Higher Education	EdD	3		3	
Occupational & Adult Education	MS, EdD	3		3	EdD: MAT or GRE, complete folder of info.
Teaching, Learning & Leadership (Curriculum & Leadership Studies, Elem, Middle, Sec, K-12 Ed, Occupational Ed Studies, Reading & Literacy, Special Ed)	MS				
Engineering, Architecture and Technology					
Architectural Engineering	MArchE				
Architecture	MArch				Specific school adm. req.
Biosystems Engineering	MBioE, MS, PhD	2			
Chemical Engineering	MChemE, MS, PhD	1			3 l.o.r.
Civil Engineering	MCivilE, MS, PhD	2			3 l.o.r.
Control Systems Engineering	MS				
Environmental Engineering	MEnvirE, MS	2			3 l.o.r.
Electrical Engineering	MElecE, MS, PhD				No entrance exam.
Engineering & Technology Management	MS				
Industrial Engineering & Management	MIE&Mgmt, MS, PhD	2			
Manufacturing Systems Engineering	MMSE	2			TOEFL 600; technical undergraduate degree. Class rank required.
Mechanical Engineering	MMechE, MS, PhD	2	2		
Human Environmental Sciences					
Design, Housing & Merchandising	MS	1			3.00 GPA; 3 l.o.r.; goal stmt; writing competency assessment first semester.
Family Relations & Child Development	MS	1			3.00 GPA, 3 l.o.r., 2 pp goals stmt, TOEFL 575.
Hospitality Administration	MS	4	4		3.00 GPA; GRE 525 or GMAT 900; 2 yrs. relevant exp.
Human Environmental Sciences (Non-profit Admin, Nutr)	MS				
Human Environmental Sciences (Design, Housing & Merchandising, Family Relations & Child Development, Hospitality Admin, Nutr Sci)	PhD	1		3	
Nutritional Sciences	MS	1			
Interdisciplinary Programs					
Environmental Science	MS, PhD	1			No entrance exam; 3.00 GPA; 3 l.o.r.; TOEFL 575. No entrance exam.
Food Science	MS, PhD				
International Studies	MS				
Natural & Applied Sciences (Gerontology, Interdisciplinary Sci-Health Care Admin, Natural Sci-Photonics)	MS	3			Gerontology only GRE 900; MAT 35.
Photonics	PhD				
Plant Science	PhD	1	2		3 l.o.r.; resume; stmt of interests.
Telecommunications Management	MS	4	4		3 l.o.r.; 1 page essay.
Veterinary Medicine					
Veterinary Biomedical Sciences	MS, PhD				

Full-time or Half-time Status. Full-time or half-time status of graduate students is:

Regular Semester

Full-time 9 or more hrs. *Half-time* 4-8 hrs.

Summer Session

Full-time 4 or more hrs. *Half-time* 2-3 hrs.

The Office of the Registrar considers employment as a teaching or research assistant when determining enrollment status. A student holding a 0.50 FTE graduate assistant appointment, and enrolled in a minimum of six hours during the fall or spring semester, or three hours during the summer semester, will be certified as a full-time graduate student.

Enrollment and Financial Assistance.

For the purpose of receiving monetary assistance through the Office of Student Financial Aid, the amount of the award is related only to the total number of credit hours in which enrolled. 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.

Enrollment During the Research Phase

Because enrollment reflects the involvement of University faculty members, the graduate student must maintain continuous enrollment in thesis and/or problems courses for credit during the entire research phase of the program. Such enrollment is not limited by the maximum number of credit hours of thesis which may apply toward a degree.

In particular, students must be enrolled in at least two hours during the semester in which they take their final examination or meet other requirements. They must also be enrolled in at least two hours during the semester in which they graduate.

Academic Regulations

Refer also to the sections on "Adding Courses," "Dropping Courses," and "Withdrawing from the University."

Graduate-credit Courses

Courses numbered 5000 and above are primarily for graduate students, and only graduate students and seniors who have obtained prior approval may enroll. The majority of courses on the master's and doctoral plans of study will be 5000 level and above.

Courses numbered 3000 and 4000 that are identified by an asterisk in the "Course Listings" of the *Catalog* can be taken by graduate students. Graduate students enrolled in these courses will be considered as taking the courses for graduate credit and expected to fulfill all academic requirements as proposed by the professor.

Courses numbered 3000 and 4000 that are identified by an asterisk may be used to meet requirements for a graduate degree on the plan of study if approved by the student's advisory committee and the dean of the Graduate College. Courses that are not identified by an asterisk may not be used to fulfill requirements for a graduate degree.

Academic Standing

Minimum Grade Requirements. A grade-point average of "B" (3.00) is required to (1) maintain good standing as a graduate student and (2) meet requirements for a degree. In determining whether a student has met minimum requirements for a degree, grades for courses on the plan of study are averaged separately from other courses not on the plan of study. In order to continue enrollment in the Graduate College, a student is expected to maintain a cumulative graduate GPA of at least 3.00. In order to receive a degree, a student must have a minimum 3.00 GPA in the course work listed on the plan of study. This course work does not include the research hours (those used to fulfill the thesis, report or creative component requirements) on the plan of study. The student must also have at least a 3.00 GPA in the hours designated as research hours on the plan of study. The grade-point averages for research hours and course work hours are figured separately.

After a plan of study has been approved, a course with a grade below a "B" cannot be replaced on the plan without approval of the dean of the Graduate College.

A course with a grade below "C" cannot be used as part of the minimum number of semester credit hours required for the degree.

Some departments have more stringent requirements. The major department should be consulted concerning minimum grade requirements.

Academic Warning and Strict Academic Probation. Grades below "B" are considered below the acceptable standard for graduate students. Any student who receives such a grade will be sent a letter of warning from the Graduate College. If a student's overall GPA drops below a 3.00, the student is subject to being placed on *strict academic proba-*

tion. A student on *strict academic probation* is required to earn a minimum grade of "B" in each course during the next semester of full-time enrollment or two semesters of part-time enrollment. Failure to do so may result in suspension from the University.

Departments are notified when students in their programs have been given academic warnings, been placed on strict academic probation, or been suspended. The department has the option to request that the student be granted a one semester reprieve from an academic suspension. However, further requests for continuance of students who have violated conditions of their probations are not usually granted.

Grades for Thesis (5000) and Dissertation (6000). The grade of "R," indicating research progress, may be assigned to thesis (5000) and dissertation (6000) courses until the research is finished. Advisers also have the option of assigning a letter grade each semester. By assigning the grade of "R," the adviser acknowledges that the student has made progress on thesis or dissertation research. Upon completion of the thesis or dissertation, the adviser submits a Change of Grade form to have the final grade entered for the thesis or dissertation.

The "R" grade can also be assigned in a course identified as the creative component portion of a master's degree. Each department in which a creative component is an option has identified one class in which "R" may be assigned if more than one semester is required to complete the creative component. Upon completion of the creative component, the adviser submits a Change of Grade form to have the final grade entered.

Pass-No Pass Grading System. The "P" or "NP" grade refers only to the final grade in the course as recorded by the Office of the Registrar. Homework will be assigned and evaluated, and tests and examinations will be given. Students taking the course on a "P" or "NP" basis are expected to satisfy these course requirements. "P" indicates a grade equivalent to an "A," "B," or "C" while "NP" indicates a grade equivalent to "D" or "F."

Graduate students may take a course utilizing the Pass-No Pass grading system with the consent of their major advisers and the dean of the Graduate College, but courses taken under this system *cannot* be used on a plan of study to meet graduate degree requirements unless the following requirements are met.

A graduate student wishing to use a course taken on a Pass-No Pass basis on his or her plan of study to meet degree requirements *must* submit a letter,

along with the Trial Schedule form at the time of enrollment, to the major adviser. The major adviser will consider the request and if approved, the letter and Trial Schedule form will be submitted to the dean of the Graduate College for approval. A student who chooses the Pass-No Pass grading system may change to the usual grading system with the consent of his or her major adviser and the dean of the Graduate College any time prior to the last date on which a course may be added. Once the deadline has passed, a student will not be permitted to change his or her choice of grading system.

Grade Appeals. A student may appeal a grade given by an instructor in a case in which he or she believes the grade awarded is inconsistent with announced grading policy. The student should consult the *"Student Rights and Responsibilities"* or contact the Office of the Executive Vice-President for information regarding initiating the appeals process.

Application for Diploma—Graduation

At the time of enrollment for the last semester or summer session of work toward a degree, the student completes an Application for Diploma card. Completion of that card initiates clearance procedure toward graduation by the Graduate College and the Office of the Registrar. The student is billed for the graduation fee along with tuition. If all requirements for the degree are not met according to deadlines specified in the Graduate College Calendar, the student must complete a new Application for Diploma at the time of re-enrollment. *Applications for diplomas are to be submitted during the first two weeks of a regular semester or the first week of a summer session.*

Records and Transcripts

All permanent records are stored in the Office of the Registrar in Whitehurst Hall. Requests for grades, transcripts and diplomas 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.

Master's Degree Programs

Accounting, MS
 Agricultural Economics, MS
 Agricultural Education, MS
 Agriculture, MAg (Agricultural Economics, Agricultural Education, Agronomy, Animal Science, Entomology, Forest Resources, Horticulture and Landscape Architecture, and Plant Pathology)
 Animal Science, MS
 Applied Behavioral Studies, MS
 Architectural Engineering, MArchE
 Architecture, MArch
 Arts Management, MA
 Biochemistry and Molecular Biology, MS
 Biosystems Engineering, MBioE, MS
 Botany, MS
 Business Administration, MBA
 Chemical Engineering, MChemE, MS
 Chemistry, MS
 Civil Engineering, MCivilE, MS
 Computer Science, MS
 Control Systems Engineering, MS
 Counseling and Student Personnel, MS
 Design, Housing and Merchandising, MS
 Economics, MS
 Electrical Engineering, MElecE, MS
 Engineering and Technology Management, MS
 English, MA
 Entomology, MS
 Environmental Engineering, MEnvirE, MS
 Environmental Science, MS
 Family Relations and Child Development, MS
 Fire and Emergency Management Administration, MS
 Food Science, MS
 Forest Resources, MS
 Geography, MS
 Geology, MS
 Health, Physical Education and Leisure, MS
 History, MA
 Horticulture, MS
 Hospitality Administration, MS
 Human Environmental Sciences (Non-profit Administration; Nutrition)
 Industrial Engineering and Management, MIE&Mgmt, MS
 International Studies, MS
 Management Information Systems/Accounting Information Systems, MS

Manufacturing Systems Engineering, MMSE
 Mass Communications, MS
 Mathematics, MS
 Mechanical Engineering, MMEchE, MS
 Microbiology, Cell and Molecular Biology, MS
 Natural and Applied Sciences, MS (Gerontology; Interdisciplinary Sciences; Health Care Administration; Natural Sciences-Photonics)
 Nutritional Sciences, MS
 Occupational and Adult Education, MS
 Pedagogy and Performance, MM
 Philosophy, MA
 Physics, MS
 Plant Pathology, MS
 Plant and Soil Sciences, MS
 Political Science, MA
 Psychology, MS
 Sociology, MS
 Statistics, MS
 Teaching, Learning and Leadership, MS
 Telecommunications Management, MS
 Veterinary Biomedical Sciences, MS
 Wildlife and Fisheries Ecology, MS
 Zoology, MS

Abbreviations:

MA	Master of Arts
MAg	Master of Agriculture
MArch	Master of Architecture
MArchE	Master of Architectural Engineering
MBA	Master of Business Administration
MBioE	Master of Biosystems Engineering
MChemE	Master of Chemical Engineering
MCivilE	Master of Civil Engineering
MElecE	Master of Electrical Engineering
MEnvirE	Master of Environmental Engineering
MIE&Mgmt	Master of Industrial Engineering & Management
MM	Master of Music
MMSE	Master of Manufacturing Systems Engineering
MMEchE	Master of Mechanical Engineering
MS	Master of Science

Admission to a Program. Some departments require that any student seeking a master's degree take an examination (i.e. GRE, GMAT) before being admitted to a program of study. See the table on "Graduate Admission Requirements" or contact the head of the major department.

Basic Requirements. The master's degree may be earned by one of three plans:

Plan I—with thesis, 30 credit hours, consisting of 24 hours of course work and six hours of research;

Plan II—with report, 32 credit hours, consisting of 30 hours of course work and two hours of research;

Plan III—with no thesis or report, 32 credit hours of course work including the creative component. The Plan III program *must* contain a creative component that is explicitly identified on the plan of study. The creative component may be a special report, an annotated bibliography, a project in research or design, or other creative activity, as designated by the advisory committee.

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

The major department, with the approval of the dean of the Graduate College, decides which alternatives are open to the candidates. Some departments also require a minimum number of semester credit hours of upper-division and graduate courses in the major field, including courses taken as an undergraduate.

Residence 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 or III. Nine semester credit hours of the 30 or 32 required for the degree may be completed by courses taken at another accredited college or university.

A student who holds a D.V.M., M.D., D.O., D.D.S., LL.B., J.D., 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.

The last eight semester credit hours for the degree must be taken on the Stillwater campus unless a written request by the student to take the work at another location is approved by the head of the major department and the dean of the Graduate College.

Courses taken at OSU-Tulsa are considered resident credit. Courses taken from the other cooperating universities in Tulsa are considered to be transfer credit. Up to 15 graduate credit hours may be transferred from OU in Tulsa to an OSU graduate plan of study.

Advisement. The student should go to the department head, who may assign an

adviser or advisory committee to assist the student in planning and pursuing the entire program for a degree. The advisory committee must include a minimum of three members of the Graduate Faculty.

Level of Courses Applied to Graduate Degree. Graduate students must enroll in no fewer than 21 semester credit hours of 5000- and 6000-level courses through Oklahoma State University as presented on the plan of study to meet requirements for the master's degree.

Plan of Study. The plan of study for the degree must be submitted to the Graduate College *prior to completion of the 17th graduate credit hour* of enrollment for a master's program. The student should secure the plan of study forms from the Graduate College, (also available from the Graduate College Internet site <http://www.osu-ours.okstate.edu/gradcoll>), develop the plan with the adviser, and submit it to the Graduate College.

Students seeking a master's degree in a teacher preparation program must be admitted to the master's in curriculum in Professional Education before submitting a plan of study.

The plan of study is subject to modification as the student progresses, but all changes must have the approval of the adviser. A final, accurate plan of study must be filed in the Graduate College by the end of the second week of the semester in which the degree is to be conferred.

Graduate credit, up to a maximum of nine hours, used to obtain one master's degree can be counted toward completion of another master's degree.

Major Subject or Field. A major field of study may cross departmental lines subject to the decision of the major department.

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

Minor Subject or Field. To minor in a subject or field, a student must complete, as a minimum, enough semester credit hours as a graduate student to satisfy, with undergraduate credits, the requirements for an undergraduate major in that department. The minor may vary from six to 15 semester credit hours.

A student may minor in two departments if the requirements are met for each and the major department and both minor departments approve.

Language Requirements. A candidate for the master's degree may be required to demonstrate a reading knowledge of a

Summary of Procedure for Master's Degree

Dean-Dean of Graduate College; GCO-Graduate College Office; DH-Department Head; TA-Temporary Adviser; Adviser-Person designated by department head to advise; Comm-Committee

Procedure	Initiate through Approved by	Time
1. Apply for admission. (Follow instruction sheet carefully. If relevant, see "Requirements for Admission to Teacher Education" in the "College of Education.")	Dean Dean	Complete 30 days prior to enrollment, (international students see section on International Admission for deadlines) or by departmental deadline.
2. Read "General Regulations" and "Master's Degree" sections, then secure registration materials in the Graduate College.	GCO	
3. Secure assignment of a temporary adviser from major department head and enroll for the first semester.	DH & TA Dean	
4. Plan program with advice of department head or designated Graduate Faculty member and submit plan of study.	Adviser Dean	Prior to completing the 17th credit hour.
5. Proceed with course work and research assignment.	Adviser	
6. Take comprehensive written examinations if required by major department.	Adviser	
7. Complete the Diploma Application and make any corrections needed on plan of study.	GCO	Within the first two weeks of the semester or session in which the degree is to be conferred. (Application is good for stated degree date only. File new diploma application if conferring of degree is delayed.)
8. Complete research, prepare final draft copy of thesis or report and submit it at least one week prior to the final examination, along with a copy of the abstract, to each member of the examining committee and to the Graduate College. The final draft must be complete and legible. Ordinary proofreading marks and minor handwritten additions, changes, etc. are permitted, but the copy should be in such condition that it can be read easily and understood clearly. The style should be determined by the advisory committee. The <i>Graduate College Style Manual</i> (available for download from Graduate College Internet site) lists specific requirements for formatting the document. The adviser must sign the copy submitted to the Graduate College.	Dean Adviser	Deadlines published yearly.

Procedure	Initiate through Approved by	Time
9. Take final examination or defense and have committee chairperson notify Graduate College of the examination results immediately following conclusion of the examination.	Adviser Dean	Deadlines published yearly.
10. Make any changes in thesis or report as required by examining committee and by the Graduate College. Advisory committee members sign final copies of thesis or report. The Graduate College makes the final decision on acceptance of the thesis or report. Candidate submits four approved copies of thesis and six approved copies of the abstract or one copy of a report and six approved copies of the abstract.	Adviser Dean	Deadlines published yearly.
11. Pay binding fee in the Office of the Bursar and return form to the Graduate College.	GCO	Form to be obtained from the Graduate College after the thesis has been formally accepted by that office.
12. Arrange for cap, gown and hood at Student Union Bookstore and attend Graduate College Convocation.		

modern foreign language. Any such requirement of the department is included on the plan of study and is to be filled out at the time the preliminary plan is approved by the student's adviser.

If a foreign language is required, the head of the major department must certify that it has been met before a final examination can be scheduled.

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

Written Examinations. Some departments require a written examination covering the major and minor fields. It is usually taken before the thesis or report has been completed. Arrangements for taking the examination should be made with the department 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 chairman of the examination committee to find out what must be done before taking another examination.

Thesis or Report. Any student working on a thesis or report should obtain a copy of the *Graduate College Thesis Dissertation Handbook* available from the Graduate College or the Internet (<http://www.osu-ours.okstate.edu/gradcoll>). A thesis or report must conform to the format specifications set forth in this manual. The style of the document is to be determined by the advisory committee and should be reflective of publications in the student's discipline.

After completing the research, the student prepares a final draft copy (complete and legible final draft) of the proposed thesis or report, and submits a copy, along with the abstract, to each member of the examining committee, and to the Graduate College. The proof copy must be signed by the adviser and be submitted to the Graduate College no later than the stated deadline date (see "Graduate College Calendar").

Thesis. The student must submit to the Graduate College four copies of the thesis with six copies of the abstract no later than the stated deadline (see "Graduate College Calendar"). The thesis copies become the property of the University. Two copies are filed in the Library and two copies are kept by the major department. There is a binding fee, payable at the Office of the Bursar.

Report. The student must submit to the Graduate College one copy of a report, with six copies of the abstract. It must be bound in a pressboard cover as described in the *Graduate College Thesis*

Dissertation Handbook. The final copy of the report, must be submitted to the Graduate College no later than the stated deadline (see "Graduate College Calendar").

Human Subjects and Research. Oklahoma State University follows federal guidelines which require a review of any research involving human subjects. All such research must be approved by the Institutional Review Board (IRB) before human subjects are involved. Guidelines on how to obtain permission to use human subjects in research are available from the departmental graduate coordinator or the executive secretary of the IRB, located in the Office of the Vice-President for Research, 203 Whitehurst. The information provides examples of activities subject to careful review and those which are easily approved.

Because University policy requires prior approval of all research involving human subjects, the letter from the IRB granting approval of the research must be included in the appendix of any thesis or dissertation submitted to the Graduate College in fulfillment of degree objectives. Failure to obtain approval for use of human subjects means that the thesis or dissertation cannot be accepted.

Final Examination. If the thesis or report option is used, the student arranges with the major department for the final examination after the draft copy of the thesis or report has been filed in the Graduate College and distributed 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. Examinations are open to all members of the Graduate Faculty, and may be attended by anyone else who obtains the permission of the committee.

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.

A student who fails to pass either a written or oral final examination should consult the chairman of the examining committee. Another examination cannot be given for two months after a failure, and a department may limit the number of times that the examination may be repeated.

If the non-thesis option is used, the department head or adviser must notify

the dean of the Graduate College that the student has satisfactorily completed all departmental requirements. Both positive and negative results must be reported to the Graduate College.

Time Limit. Students are expected to complete the requirements for the master's degree within seven years from first enrollment after admission to the master's degree program. Any extension of this time limit must be approved by the Graduate Faculty Council.

To determine whether or not courses taken more than seven years before the anticipated date of the degree can be counted toward the degree, the student should consult the departmental graduate adviser. Such courses cannot be accepted except on a complete plan of study which gives the date that the requirements for the degree are to be completed. They must be a part of a study plan and can be approved only for a specified time. Courses taken more than 10 years prior to actual graduation will not be accepted on a plan of study without a formal request from the advisory committee and approval of the Graduate Faculty Council.

Continuous Enrollment. A graduate student must maintain continuous enrollment during the entire research phase of the program. Such enrollment is not limited by the maximum number of credit hours of thesis which may apply to the degree. Continuous enrollment can be met with six credit hours during each 12-month period or two credit hours in each of the fall, spring and summer semesters. Students who are using physical or faculty resources of the University are expected to be enrolled during each semester in at least two credit hours.

Failure to maintain continuous enrollment requires submission of a new application for readmission to the graduate program. If readmitted, all requirements in effect at the time of readmission, must be completed.

Special Requirements for Selected Master's Degrees. Requirements for the Master of Agriculture, Master of Architecture, Master of Architectural Engineering, Master of Business Administration, and Master of Engineering are described in detail elsewhere in the *Catalog*. Each degree has requirements that are program specific and exceed the minimal requirements specified by the Graduate College.

Doctor of Philosophy Degree Programs (Ph.D.)

Agricultural Economics
Agricultural Education
Animal Breeding and Reproduction
Animal Nutrition
Biochemistry and Molecular Biology
Biosystems Engineering
Business Administration
Chemical Engineering
Chemistry
Civil Engineering
Computer Science
Crop Science
Economics
Educational Psychology
Electrical Engineering
English
Entomology
Environmental Science
Food Science
History
Human Environmental Sciences (Design, Housing and Merchandising; Family Relations and Child Development; Hospitality Administration; Nutritional Sciences)
Industrial Engineering and Management
Mathematics
Mechanical Engineering
Microbiology, Cell and Molecular Biology
Photonics
Physics
Plant Pathology
Plant Science
Psychology
Sociology
Soil Science
Statistics
Veterinary Biomedical Sciences
Wildlife and Fisheries Ecology
Zoology

The Doctor of Philosophy degree is granted in recognition of high achievement in scholarship and independent investigation. The candidate 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.

Basic Requirements. The Doctor of Philosophy degree requires six semesters of full-time graduate study (a minimum of 90 semester credit hours) beyond the bachelor's degree, or four semesters of full-time graduate study (a minimum of 60 semester credit hours) beyond the master's degree. This includes a minimum of 15 credits for the dissertation (6000). 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 D.V.M., M.D., D.O., D.D.S., LL.B., J.D., 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 only receive one 30-hour credit reduction in the Ph.D. requirements regardless of the number of master's or professional degrees that he or she holds.

Admission to a Program. A student who wishes to earn a Doctor of Philosophy degree may be required to take examinations based on a year of graduate study, or to produce other evidence of scholarly achievement consistent with expected academic competence in a field of specialization. Contact the head of the major department for the requirements for admission to the doctoral program.

The instructions for admission, registration, and other information given under "General Regulations" are also applicable to those who are working toward doctoral degrees.

Temporary Adviser. At the beginning of a student's doctoral program, the head of the major department will designate a member of the Graduate Faculty to serve as temporary adviser to the student. The temporary adviser will arrange the collection of information about the student and assist him or her in the early selection of courses. Often, it is the graduate coordinator who serves as the temporary adviser.

Advisory Committee. Upon recommendation of the head of the major department or of the graduate committee of the department, an advisory committee of not fewer than four members will be appointed by the dean of the Graduate College. The duties of the advisory committee consist of (1) advising the student, (2) assisting the student in preparing a plan of study, (3) preparing and administering the qualifying examination, (4) assisting in planning and conducting the research, (5) supervising the writing

of and passing upon the dissertation, and (6) conducting the dissertation defense.

The major adviser of the advisory committee must be a full member of the Graduate Faculty. Under special circumstances, the dean of the Graduate College may approve a substitute adviser. Each doctoral committee must have at least one member of the Graduate Faculty from outside the student's major department.

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

Preliminary Conference. As soon as the student is notified that an advisory committee has been appointed, 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.

Plan of Study. After the preliminary conference, the student should complete the plan of study for the degree, have it approved by the advisory committee, and submit the original form to the Graduate College.

The plan of study must be submitted to the Graduate College prior to completion of the 28th credit hour 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 should include approximately 75 percent of courses at the 5000-6000 level and at least 15 hours dissertation credit. Forms for preparing the plan of study may be obtained on the Graduate College Internet site (<http://www.osu-ours.okstate.edu/gradcoll>). The plan of study must include a minimum of 60 hours beyond the master's degree. Courses from the master's degree are not listed on the doctoral plan of study.

Because the acceptance of work which 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. Courses taken more than 10 years prior to actual graduation will not be accepted on a plan of study.

Changes in the plan 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 before the end of the second week of the semester in which the degree is to be conferred.

Minor Subject or Field. As a means of giving depth and breadth to their doctoral

programs, most departments require work in a minor field or at least a selection of extra-departmental courses. To minor in a subject or field, as a minimum, the graduate student must complete graduate level work beyond requirements for an undergraduate degree in the minor department. A department in which a student indicates a minor must certify to the dean of the Graduate College the satisfactory completion of requirements for a minor.

Character of Work. The satisfactory completion of course work (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 other requirements of the major department.

Residence Requirements. A minimum of 30 semester credit hours must be taken at Oklahoma State University. All credit accepted toward the degree beyond the master's degree must be on the student's plan of study and be approved by the advisory committee.

One year of the last two years must be spent in continuous residence at this institution.

With prior approval by the advisory committee, the student may do research for the degree *in absentia*. Research conducted while not in residence is under the supervision of the major adviser and the advisory committee.

Courses taken at OSU-Tulsa are considered resident credit. Courses taken from the other cooperating universities in Tulsa are considered to be transfer credit. Up to 15 graduate credit hours may be transferred from OU in Tulsa to an OSU graduate plan of study.

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 degree-granting departments or 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.

Qualifying Examination. The qualifying examination is comprehensive, covering the entire area of the student's graduate study. The examination may be written, oral or both. The examination must be passed not less than six months before the degree is granted (see "Admission to

Candidacy"). The results of the examination are reported to the Graduate College on the Admission to Candidacy form.

In order to take the qualifying examination, the student must have an approved plan of study and dissertation proposal on file in the Graduate College, and have the approval of the advisory committee.

In case of failure to pass any part of this examination, the student will be notified in writing of the conditions under which another examination can be taken. A second examination may not be given earlier than four months after a failure.

If the results of the second examination are unsatisfactory, no other examination may be given without the approval of the Graduate Council.

Admission to Candidacy. A student must be admitted to candidacy at least six months before the commencement in which the Doctor of Philosophy degree will be received.

Before being admitted to candidacy, the student must have (1) an approved plan of study on file in the Graduate College; (2) a dissertation proposal or outline approved by the student's advisory committee; and, (3) passed the qualifying examination.

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 chairperson.

The dissertation must follow specifications in the *Graduate College Thesis Dissertation Handbook*, available from the Graduate College on the Internet (<http://www.osu-ours.okstate.edu/gradcoll>). All dissertation copies must have the necessary approval signatures before submission to the Graduate College.

After completing the research, the student prepares a final draft copy (complete and legible) of the proposed dissertation and submits a copy, along with the abstract, to each member of the committee and to the Graduate College. The copy being submitted to the Graduate College must be approved by the student's dissertation adviser. The final draft copy must be submitted to the Graduate College no later than the stated deadline date (see "Graduate College Calendar").

Human Subjects and Research. Oklahoma State University follows federal guidelines which require a review of any research involving human subjects. All

Summary of Procedure for Doctoral Degree

Dean-Dean of Graduate College; DH-Department Head; TA-Temporary Adviser; Comm-Committee; Ch-Chair of Committee

Procedure	Initiate through Approved by	Time
1. Apply for admission. (Follow instruction sheet carefully.)	Dean Dean	Complete 30 days prior to enrollment, (international students see section on International Admission for deadlines) or by departmental deadline.
2. Secure assignment of a temporary adviser from major department head and enroll.	DH & TA Dean	
3. Select the appointment of advisory committee.	TA Dean	
4. Prepare plan of study with assistance of committee. Submit one original approved copy to Graduate College.	Comm Dean	Prior to completion of the 28th credit hour.
5. Fulfill foreign language requirement or attain other required proficiencies.		Prior to qualifying examination.
6. Complete major portion of course work and plan dissertation program with committee. Submit copy of approved dissertation outline to Graduate College.	Ch Dean	As early in the research stage as possible.
7. Apply for and take qualifying examination.	Ch	As early in the doctoral program as feasible.
8. Submit results of qualifying examination and/or application for admission to candidacy.	Comm Dean	Not less than six months prior to Commencement in which degree will be conferred.
9. Verify accuracy of plan of study in Graduate College. Secure committee approval for any necessary changes. Check on time limit for the degree.	Comm Dean	Within the first two weeks of the semester or summer session in which degree is to be conferred.

Procedure	Initiate through Approved by	Time
10. Complete the Diploma Application.	Dean	Within the first two weeks of the semester or session in which the degree is to be conferred. (Application is good for stated time only. File new diploma application if conferring of degree is delayed.)
11. Complete research, prepare final draft copy of dissertation and submit it at least one week prior to the examination, along with a copy of the abstract, to each member of the committee and to the Graduate College. The final draft must be complete and legible. Ordinary proof-reading marks and minor handwritten additions, changes, etc., are permitted, but the copy should be in such condition that it can be read easily and understood clearly. The format must follow the <i>Graduate College Style Manual</i> recommendations; however, the style is to be determined by the advisory committee. The adviser must sign the copy submitted to the Graduate College.	Ch Comm Dean	Deadlines published yearly.
12. Schedule dissertation defense. Committee chairperson notifies Graduate College of the results immediately following conclusion of the examination.	Ch Dean	
13. Make any changes in dissertation required by examining committee and by the Graduate College. Advisory committee members sign final copies of dissertation. The Graduate College makes the final decision on acceptance of the dissertation. Candidate submits four approved copies of the dissertation and six approved copies of the abstract.	Ch Comm Dean	Deadlines published yearly.
14. Pay binding and microfilming fees in the Office of the Bursar; complete questionnaire and microfilming agreement form and return all forms to the Graduate College.		Form to be obtained from the Graduate College after dissertation has been formally accepted by that office.
15. Rent or buy cap, gown, and hood at Student Union Bookstore and attend Graduate College convocation.		

such research must be approved by the Institutional Review Board (IRB) before human subjects are involved. Guidelines on how to obtain permission to use human subjects in research are available from the departmental graduate coordinator or the executive secretary of the IRB, located in the Office of the Vice-President for Research, 203 Whitehurst. The information provides examples of activities subject to careful review and those which are easily approved.

Because University policy requires prior approval of all research involving human subjects, the letter from the IRB granting approval of the research must be included in the appendix of any dissertation submitted to the Graduate College in fulfillment of degree objectives. Failure to obtain prior approval for use of human subjects means that the dissertation cannot be accepted.

Final Examination. The final examination is primarily a defense of the dissertation. If the defense is judged inadequate, a re-examination decision will be made by the advisory committee. The examination is open to all members of the Graduate Faculty and may be attended by anyone else who obtains the permission of the committee.

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 any changes required by the committee and by the Graduate College and submit the dissertation in final form signed by the committee to the Graduate College.

Four copies of the dissertation in final form and six copies of the abstract must be submitted to the Graduate College no later than the stated deadline (see "Graduate College Calendar"). The dissertation copies become the property of the University; two copies are filed in the Library and two copies are kept by the major department. There is a binding fee, payable at the Office of the Bursar.

All dissertations are microfilmed by University Microfilms, Inc. The student is required to pay a fee for microfilming the complete document and for publication of an abstract of about 350 words. The student must complete a University Microfilms Agreement Form after the dissertation has been accepted by the Graduate College. Copyrighting the dissertation is not required, but can be done at a small additional cost.

Time Limit. Students are expected to complete the requirements of the Ph.D. degree within nine years from their first enrollment in the degree program. After that time a new program of study must be arranged with the advisory committee and filed in the Graduate College. No

courses over 10 years old at the time of graduation may be used to fulfill requirements.

Any exception to these time limits must be approved by the Graduate Faculty Council.

Continuous Enrollment. A graduate student must maintain continuous enrollment during the entire research phase of the program. Such enrollment is not limited by the maximum number of credit hours of dissertation which apply to the degree. Continuous enrollment can be met with six credit hours during each 12-month period or two credit hours in each of the fall, spring and summer semesters. Students who are using physical or faculty resources of the University are expected to be enrolled during each semester in at least two credit hours.

Failure to maintain continuous enrollment requires submission of a new application for readmission to the graduate program. If readmitted, all requirements of the Graduate College and the department in effect at the time of readmission must be completed.

Doctor of Education Degree Programs (Ed.D.)

Applied Educational Studies
Curriculum and Instruction
Educational Administration
Higher Education
Occupational and Adult Education

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.

Basic Requirements. The minimum time required for the doctor's degree is six semesters of full-time graduate study (a minimum of 90 semester credit hours) beyond the bachelor's degree, or four semesters of full-time graduate study (a minimum of 60 semester credit hours) beyond the master's degree. Courses at the 5000 and 6000 level should make up approximately 75 percent of the plan of study and must include 10 hours for the doctoral dissertation. The student must register for the dissertation in the same

way he or she registers for other courses. 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 D.V.M., M.D., D.O., D.D.S., LL.B., J.D., 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 only receive one 30-hour credit reduction in the Ed.D. requirements regardless of the number of master's or professional degrees that he or she holds.

Admission to a Program. The student can secure an application form from the Graduate College along with information concerning areas and programs of study offered. The application will be evaluated by the faculty of the appropriate school and by the Graduate College. A student planning to seek the Doctor of Education degree must provide specific information as requested by the College of Education (i.e., vita, letters of recommendation, protocols of scholarly work, and test scores). Test scores required are the Miller Analogies Test and/or the aptitude portion of the Graduate Record Examination. A student should contact his or her school head to determine which tests are required for admission.

When the student's application is complete, a graduate review committee will review the application and recommend to the dean of the Graduate College whether or not the student should be admitted. The dean of the Graduate College will inform the student of admission decision.

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

Advisory Committee. Upon recommendation of the school head or of the graduate committee of the school, an advisory committee of not fewer than four 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. The duties of the advisory committee consist of (1) advising the student, (2) assisting the student in preparing a program of study, (3) preparing and administering the qualifying examination, (4) assisting in planning and conducting the research, (5) supervising the writing and subsequent approval of the dissertation, and (6) conducting the final examination.

Preliminary Conference. As soon as the student is notified that an advisory committee has been appointed, a conference should be arranged with the chairperson and committee. Before the conference the student must see that the chairperson has transcripts of previous work and other information that will be needed in the conference. During the conference the student and committee will discuss the student's plans for future study.

Plan of Study. After the preliminary conference, the student should complete the plan of study for the degree, have it approved by the advisory committee and submit the original form to the Graduate College.

The plan of study must be submitted to the Graduate College prior to the completion of the 28th credit hour 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 approximately 75 percent of courses at the 5000-6000 level and 10 hours of dissertation credit. Forms for preparing the plan of study may be obtained on the Graduate College Internet site (<http://www.osu-ours.okstate.edu/gradcoll>). The plan of study must include a minimum of 60 hours beyond the master's degree or 30 hours beyond the Ed.S. Courses from the master's degree or Ed.S. are not listed on the doctoral plan of study.

Because the acceptance of work which 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. Courses taken more than 10 years prior to actual graduation will not be accepted on a plan of study.

Changes in the plan 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 before the end of the second week of the semester in which the degree is to be conferred.

Character of Work. Completing a number of courses with a "B" average (see "General Regulations") is one of the requirements for the doctoral 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 other requirements of the major field or school.

Residence Requirements. A minimum of 30 semester credit hours must be taken at Oklahoma State University. One academic year of the last two, as deter-

mined by the appropriate school, must be spent in continuous residence at this institution.

The residence requirement can be met by two semesters of full-time graduate study. Any other way of meeting the residence requirement must have the approval of the student's advisory committee and of the dean of the Graduate College.

Courses taken at OSU-Tulsa are considered resident credit. Courses taken from the other three cooperating universities in Tulsa are considered to be transfer credit. Up to 15 graduate credit hours may be transferred from OU in Tulsa to an OSU graduate plan of study.

Foreign 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 computer usage.

Qualifying Examination. Before taking the qualifying examination, the student must have (1) completed the main areas of an approved plan of study; (2) completed an outline or proposal for the dissertation approved by the advisory committee; and (3) received approval from the advisory committee to sit for the examination.

The qualifying examination is designed to measure the student's proficiency in the field of specialization, the breadth and depth of his or her professional education background and knowledge of cognate subjects. The examination may be both written and oral but part of it must be written. This examination must be passed and the result reported to the Graduate College on the admission to doctoral candidacy form at least six months before the degree is granted (see "Admission to Doctoral Candidacy" in the "Doctor of Philosophy" section).

In case of failure to pass this examination, the student will be notified by the examining committee of the condition under which another examination may be taken. A student who fails on either the qualifying or final examination cannot take another examination for four months. If the result of the second examination is unsatisfactory, no other examination may be given without the approval of the Graduate Council.

Dissertation. A dissertation (doctoral thesis) is required of each candidate for the Doctor of Education 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 Ph.D. The Ed.D. candidate should refer to the "Doctor of Philosophy" section on dissertations and submission procedures through the Graduate College.

Human Subjects and Research. Oklahoma State University follows federal guidelines which require a review of any research involving human subjects. All such research must be approved by the Institutional Review Board (IRB) before human subjects are involved. Guidelines on how to obtain permission to use human subjects in research are available from the departmental graduate coordinator or the executive secretary of the IRB or Office of the Vice-President for Research, 203 Whitehurst. The information provides examples of activities subject to careful review and those which are easily approved.

Because University policy requires prior approval of all research involving human subjects, the letter from the IRB granting approval of the research must be included in the appendix of any dissertation submitted to the Graduate College in fulfillment of degree objectives. Failure to obtain prior approval for use of human subjects means that the thesis or dissertation cannot be accepted.

Time Limit. Students are expected to complete the requirements for the Doctor of Education degree within nine years after beginning course work in the degree program. Otherwise a new program of study must be arranged with the advisory committee and filed in the Graduate College. No courses over 10 years old at the time of graduation may be used to fulfill requirements.

Any exception to these time limits must be approved by the Graduate Faculty Council.

Continuous Enrollment. Continuous enrollment must be maintained during the entire research phase of the program. Such enrollment is not limited by the maximum number of credit hours of dissertation which apply to the degree. Continuous enrollment can be met with six credit hours during each 12-month period or two credit hours in each of the fall, spring and summer semesters. Students who are using physical or faculty resources of the University are expected to be enrolled during each semester in at least two credit hours.

Failure to maintain continuous enrollment requires submission of a new application for readmission to the graduate program. If readmitted, all requirements of the Graduate College and the school

in effect at the time of readmission, must be completed.

Specialist in Education Degree Program (Ed.S.)

Education

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

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 undertaking of the field of specialization and its relation to other areas.
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.

Admission. The student can secure application forms from the Graduate College available on the Graduate College Internet site (<http://www.osu-ours.okstate.edu/gradcoll>) along with information concerning areas and programs of study offered. The application will be evaluated by the faculty of the appropriate school and by the Graduate College.

Admission to a Program. A student planning to seek the Specialist in Education degree must provide specific information as requested by the College of Education (i.e., vita, letters of recommendation, protocols of scholarly work, and test scores). Test scores required are the Miller Analogies Test and/or the aptitude portion of the Graduate Record Examination. A student should contact the school head to determine which tests are required for admission.

A graduate review committee for Specialist in Education programs will review the student's application and recommend to the dean of the Graduate College whether or not the student should be admitted to the program. The dean of the Graduate College will inform the student of the admission decision.

Temporary Adviser. 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 adviser to the student. The temporary adviser will guide the student in the selection of courses for the first semester.

Advisory Committee. Upon recommendation of the school head or the graduate committee of the school, an advisory committee of not fewer than four 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 advisory committee consists of three members of the graduate faculty, with the chair holding associate or full membership status. All three members may be chosen within the student's area of study. Additional members may come from other disciplines.

Plan of Study. As soon as practical after the appointment of the committee, the student will arrange with the chair for a conference for the purpose of planning a program of study. The plan of study will include all graduate work required to complete the program. The original form of the plan of study should be submitted to the Graduate College. This plan may be modified with the approval of the advisory committee and the dean of the Graduate College. Courses taken more than 10 years prior to actual graduation will not be accepted on a plan of study. The plan of study must be submitted to the Graduate College prior to the completion of the 17th credit hour of enrollment in the Ed.S. program.

Credit-hour Requirements. A minimum of 60 semester credit hours beyond the bachelor's degree or 33 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.

Character of Work. Completing an appropriate number of courses with a "B" average (see "General Regulations") is only one of the requirements for this 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.

Residence Requirements. The candidate must be enrolled full-time at OSU for one academic year of the two years required for the degree. Two summer sessions are considered equivalent to one semester for purposes of meeting the residence requirement.

Ordinarily the last 20 hours, including the study and report, must be earned in residence on the Stillwater campus of Oklahoma State University. Any deviation

must be recommended by the advisory committee and approved by the dean of the Graduate College. No more than nine hours may be transferred from another university.

Courses taken at OSU-Tulsa are considered resident credit. Courses taken from the other cooperating universities at Tulsa are considered to be transfer credit. Up to 15 graduate credit hours may be transferred from OU-Tulsa to an OSU plan of study.

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.

Time Limit. Students must complete all requirements for the Specialist in Education degree within seven years after beginning course work in the degree program. No course over 10 years old at the time of graduation may be used to satisfy degree requirements. Any exception to these time limits must be approved by the Graduate Faculty Council.

Continuous Enrollment. Continuous enrollment must be maintained during the duration of the program through enrollment in at least six credit hours over any 12 month period. Normally this requirement is met by enrolling in at least two credit hours in each of the spring, summer and fall terms. Students who are using physical or faculty resources of the University are expected to be enrolled each semester in at least two hours.

Failure to maintain continuous enrollment requires submission of a new application for readmission to the graduate program. If readmitted, all requirements of the Graduate College and the program in effect at the time of readmission must be completed.

Credit Toward an Ed.D. or a Ph.D. A student holding an Ed.S. may have the credit hour requirements for a Ph.D. or Ed.D. reduced to 30 hours subject to recommendation by the advisory committee and approval of the dean of the Graduate College. However, all of the remaining 30 hours toward the doctoral degree must be taken at the 5000 or 6000 level and all must be taken at OSU.