# **Spears School of Business**

# **College Administration**

Ken Eastman, PhD-Dean Karen Flaherty, PhD—Associate Dean Carol Johnson, PhD—Associate Dean Ramesh Sharda, PhD—Interim Vice Dean

#### **Campus Address and Phone:**

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Today's business world is one of excitement and challenge. At the Spears School, we engage and inspire the student in everyone to dream big, stretch leadership potential, transform organizations, and make a difference in the world. We expect hard work, creativity, and innovation in pursuit of your passions; and expect those to pay off through transformation of the lives and organizations that we touch.

The goal to which the Spears School continually strives is to be the business school known for positively transforming organizations. We will accomplish this through the Spears Engagement Experience which actively involves stakeholders in a learning environment that is explorative, challenging, inspiring, supportive, and transformative. Our core activities and strategic initiatives that support these goals are:

- 1. institutionalize 'the Spears Engagement Experience';
- 2. strengthen relationships;
- foster a culture of collegiality and collaborations; 3.
- 4. provide boundaryless learning;
- 5. advance high impact scholarship;
- 6. increase reputation and recognition.

The Spears School provides students with a broad educational experience by including studies in social sciences, communications, humanities, fine arts, natural science and mathematics. In addition, the student is provided with an understanding of the functions of business and how they integrate within organizations.

#### Accreditation

The Spears School of Business (spears.okstate.edu) at Oklahoma State University is accredited by The Association to Advance Collegiate Schools of Business (AACSB International).

# **High School Preparation**

Although a sound high school program is adequate preparation, prospective business students will benefit from a strong background in English and mathematics. Also, course work in history and government, science, geography, computer science, foreign language and public speaking will be quite valuable.

## **Scholarships**

Oklahoma State University has an extensive scholarship program which includes entering freshmen. For full consideration as a prospective student, applications should be sent to the OSU Office of Scholarships and Financial Aid by February 1 during one's senior year in high school. Spears School of Business scholarships are primarily designated for sophomores, juniors and seniors. Scholarship awards are based on academic performance, participation, leadership and need, and applications must be received by the end of January.

#### Academic Advisement and Enrollment Procedure

Students plan their study in conference with a staff adviser in the Business Student Success Center of the Spears School of Business.

The associate dean, as well as the assistant director of the Business Student Success Center, is available to all students for counseling on special problems.

## Academic Programs

Undergraduate Programs. The Bachelor of Science in Business Administration degree is offered by five departments and two schools. Departmental majors are listed below

Accounting, with a major in accounting.

Economics and Legal Studies in Business, with majors in economics (with options in business economics and quantitative studies and pre-law) and

general business (with an option in pre-law).

Entrepreneurship, with a major in entrepreneurship.

Finance, with a major in finance and an option in commercial bank management

Management, with a major in management and options in human resource management and sports management.

Management Science and Information Systems, with a major in management information systems and options in management science and computer systems and information assurance.

Marketing, with majors in marketing and international business.

Additional information about the undergraduate programs in the Spears School of Business can be found on the Internet at spears.okstate.edu/future/ undergraduate

Outstanding students in the Spears School of Business who meet the requirements of the Honors College may earn various honors designations while completing their undergraduate degree in this School. For more information, please refer to the Honors College information in the Catalog.

Master's Degree Programs. Two types of master's degrees are available to students desiring to undertake advanced work in the business area, specialized master's of science degrees and the interdisciplinary Master of Business Administration degree. Students enrolled in these programs will be charged a \$250 fee to support Career Services and Professional Development activities.

The Master of Business Administration degree allows concentrations in management, management information systems, marketing, entrepreneurship, or finance. The following identifies where additional information about this degree can be found in the Catalog:

The Master of Business Administration degree (see "Business Administration")

The Master of Science degree requires completion of a graduate major in accounting, economics, entrepreneurship, management information systems, quantitative financial economics or telecommunications management. The MBA also allows more in-depth study in the areas of accounting, risk management, information assurance and network security, information systems, telecommunications management, entrepreneurship and economics. The following identifies where additional information about these degrees can be found in the Catalog

Master of Science in Accounting degree. (See "School of Accounting.")

Master of Science in Economics degree.\*

(See "Department of Economics and Legal Studies in Business.")

Master of Science in Entrepreneurship degree.

(See "School of Entrepreneurship.")

The Master of Science in Management Information Systems (MIS) degree. (See "Department of Management Science and Information Systems.")

Master of Science in Quantitative Financial Economics degree. (See "Department of Finance.")

Master of Science in Telecommunications Management degree. (See "Department of Management Science and Information Systems.") \*The Master of Science in Economics is not subject to AACSB accreditation

Doctor of Philosophy Degree Programs. Graduate work toward the Doctor of Philosophy degree with a major in economics is offered in the Department of Economics and Legal Studies in Business\*. Graduate work toward the Doctor of Philosophy degree with a major in business administration is offered in the departments of Entrepreneurship, Finance, Management, Management Science and Information Systems, Marketing, the School of Accounting and the School of Entrepreneurship. The Spears School also offers a PhD in Business Administration that is tailored for executives.

Additional information about PhD programs can be found in the "Business Administration" section as well as in the various departmental sections.

\*The PhD in Economics is not subject to AACSB accreditation

# **Career Services**

Representatives of more than 200 business, industrial concerns and governmental agencies annually interview graduating seniors and graduate students of the Spears School of Business. The School has career services specialists available to support business students in addition to the resources available to all OSU students.

#### **General Education Requirements**

The minimum general education requirements are summarized as follows: not less than 40 semester hours, including six hours of English composition and 31 hours in the breadth areas. These include: six hours in American history and government, three hours in social and behavioral sciences, six hours in humanities, three hours in analytical and quantitative thought and seven hours in the area of natural sciences, with one of the hours in scientific investigation.

Students are also required to take a "diversity" (D) designated course. This may be met in any part of the student's program, and thus does not necessarily add to the number of hours required. Diversity courses provide an understanding of the cultural context of relationships, issues and trends in a multicultural and diverse society related to such factors as culture, ethnicity, nationality, age, gender, sexual orientation, mental and physical characteristics, education, family values, religious and spiritual values, socioeconomic status and unique characteristics of individuals, couples, families, ethnic groups, and communities.

An additional requirement is an "international dimension" (I). This also may be met in any part of the student's program, and thus does not necessarily add to the number of hours required. The international dimension simply requires each student to learn about cultures and societies outside the United States. The scientific investigation requirement involves some kind of laboratory experience with student involvement. More details concerning these and other requirements can be found in the next section, "Lower-division Requirements."

# **Lower-Division Requirements**

Work in the freshman and sophomore years is planned in such a way as to give the student basic information in the general areas of (1) behavioral and social sciences, (2) communications, (3) humanities and fine arts, (4) natural science and mathematics and (5) business foundation courses. The student may also select additional hours from courses in these areas, with the opportunity of achieving either further breadth or a certain degree of depth by concentrating these hours in a particular area of interest. As part of the student's general education, one course must be selected that is identified as satisfying the international dimension (I) requirement and one must be selected to satisfy the diversity (D) requirement.

During the freshman and sophomore years, the student will complete courses in each of the following areas:

- Behavioral and social sciences: American history, three semester credit hours; American government, three hours; and three hours elected from courses identified by the University as satisfying social science (S) credit.
- Humanities and fine arts: Six semester credit hours elected from courses identified by the University as satisfying humanities (H) credit.
- Natural science and mathematics: A minimum of 10-13 semester credit hours with the specific number of required hours in mathematics and natural science varying with the major chosen. Specific requirements for each major are published by the University in the book Undergraduate Programs and Requirements.
- Communications: English composition, six semester credit hours, and introduction to speech communication, three hours.
- Business core: All undergraduate business majors must complete the following business core course requirements: ACCT 2103, ACCT 2203, MGMT 4513, ECON 2103, 2203, EEE 2023, FIN 3113, LSB 3213, MGMT 3013, MKTG 3213, MSIS 2103, 3223, and STAT 2023. For non-business students, the University prerequisite for upper-division courses applies. (See "Academic Regulations" elsewhere in the Catalog.)
- General electives: In addition, the student may elect courses from any area except lower-division aerospace studies and military science and LEIS and HHP activity courses to complete degree requirements.

Credits earned during the freshman and sophomore years at a two-year college may not be substituted for junior and senior course requirements in majors in the Spears School of Business.

# **Departmental Clubs and Honor Societies**

African American Business Students Association Alpha Kappa Psi Association for Information Systems Association of Information Technology Professionals Beta Alpha Psi (accounting honor society) Beta Gamma Sigma (business administration honor society) Business Honors Organization Business News Club **Business Student Council** Delta Sigma Pi (professional business organization) Economics Society Entrepreneurship Club Financial Management Association Freshman Business Student Leaders GARP Student Chapter: Organization for MSQFE Students Human Resource Management Association

Information Security and Assurance Club Marketing Club MBA Student Association Net Impace OSU-Tulsa Business Association Phi Beta Lambda (business leadership) Sports Management Club Students in Free Enterprise

#### School of Accounting

Robert Cornell, PhD—Associate Professor and School Head

The School of Accounting offers three degree programs in accounting: (1) BS in Business Administration with a major in accounting, (2) MS in accounting and (3) PhD in business administration with emphasis in accounting.

The common objective of the BS and MS in accounting programs is to educate students to commence and continue to develop in a wide range of professional accounting careers. The specific objective of the BS in accounting program is to provide basic conceptual and business knowledge as a foundation for accounting career development; the objective of the MS in accounting than is possible in the BS program, in order to prepare graduates for careers as professional accountants in financial institutions, industry, non-business organizations and public practice.

Students who are considering a professional accounting career should have above-average aptitudes in mathematics and English, disciplined work habits, an interest in working with people and an attitude of service.

Students who have the objective of sitting for the CPA exam in Oklahoma must have a BS degree and are required to complete 150 semester hours consisting of 76 upper-division hours, 30 hours of accounting above introductory accounting (including 3 hours of external auditing), and nine upper-division hours from other business related areas. The Professional Program in Accounting (PPA) is especially designed to enable students to become CPA eligible. The PPA allows students to complete the requirement of 150 hours of education and receive a BS and MS in accounting. The MS in accounting earned at Oklahoma State University satisfies educational requirements for CPA candidates in all jurisdictions of the United States.

Accreditation. The School of Accounting is separately and fully accredited by the Association to Advance Collegiate Schools of Business (AACSB International).

# Graduate Programs

The Master of Science in Accounting Degree. The specific objective of the MS in accounting is to provide candidates with a greater breadth and depth than is possible in the BS program, in order to prepare graduates for careers as professional accountants in financial institutions, industry, non-business organizations and public practice and to develop judgmental ability in accounting and related areas. Advanced courses provide a theoretical base for insight into significant problems confronting the accounting profession. In addition, a specialty in financial reporting, taxation, management information systems, finance or entrepreneurship is available for interested candidates. The candidate receives assistance from the faculty in selecting a pattern of courses designed to prepare the student according to the chosen professional goals.

Graduates of recognized colleges and universities whose records indicate adequate intellectual capacity and desirable personal characteristics may qualify for admission. Minimum admission standards are a GMAT score of 550, an undergraduate grade-point average in accounting of 3.25, and an overall grade-point average of 3.0.

**Prerequisites.** The following courses are required before beginning the MS program: 27 hours of accounting courses and 21 hours of other specified business courses.

The Doctor of Philosophy Degree. The PhD in the Spears School of Business with a major in accounting emphasizes flexibility to meet the particular needs and objectives of individual candidates. The program is designed to provide the highest degree of preparation for the individual student, enabling the student to make significant professional contributions in research, teaching or business or government positions.

Graduates of recognized colleges and universities whose records indicate adequate intellectual capacity and desirable personal characteristics may qualify if they have a good academic record and achieve satisfactory scores on the GMAT. Admission is very competitive.

The PhD program is designed so that a candidate may, at his or her option, specialize in one of the following accounting areas: auditing, managerial accounting, financial accounting systems or taxation. All candidates are required to take a series of seminars that provide an overview of relevant academic literature. These seminars are restricted to PhD candidates. Two minor areas, one of which may be outside the Spears School of Business, are required, in addition to competence in economics and quantitative analysis. The candidate's advisory committee is responsible for assisting in the development of a plan of study encompassing the above areas. Students in residence are required to do teaching or research on a half-time basis while earning the degree.

#### **Business Administration**

# **Graduate Programs**

The Master of Business Administration Degree. The Master of Business Administration program provides graduate professional education for individuals preparing for administrative careers in either the private or public sectors. It is a comprehensive yet flexible program providing the knowledge and analytical tools to cope with the complexities of management within diverse environments. There are a number of delivery options for the MBA: full-time, part-time, professional and distance.

Full-Time MBA. The full-time MBA is a 52-credit-hour semi-lock step program designed for individuals who want a cohort-based experience. Applicants must have earned a four-year undergraduate degree or equivalent from an accredited university and have competitive GPA and GMAT scores. Full-time students may choose between a general MBA and an in-depth specialization. Students choosing a general MBA are free to select 12 hours of electives in functional areas of business such as marketing, finance or management. Students seeking a more in-depth area of study may select from the following seven options: accounting, entrepreneurship, risk management, information assurance and network security, information systems, telecommunications management and economics.

**Part-time MBA.** The part-time MBA is a 48-credit-hour program designed for individuals who wish to enroll on a part-time basis. The self-paced program allows students to take classes as their schedules permit. Applicants must have earned a four-year undergraduate degree or equivalent from an accredited university and have competitive GPA and GMAT scores.

Professional MBA. The professional MBA was developed with the working professional in mind. It is a 36-credit-hour program that allows for flexibility and course selection to best meet career objectives. Applicants must have a minimum of three years substantive management work experience and a four-year undergraduate degree or equivalent from an accredited university either in business or engineering. Applicants meeting the work experience criteria, but lacking an undergraduate degree in business or engineering, will be considered on a case-by-case basis. Applicants must have competitive GPA and GMAT scores.

**Distance Learning.** The MBA part-time and professional programs can be completed through a distance learning format. Distance learning is an ideal educational format for individuals seeking an alternative to the traditional oncampus classroom experience. Classes are delivered via CD-ROM or video streaming on the Internet. Interaction with faculty and other students occurs through a web-based environment.

Regardless of the delivery option, admission is granted to those students whose potential for successful graduate study is clearly indicated by the undergraduate grade-point average, the score on the Graduate Management Admissions Test, letters of recommendation from three sources, past work experience, extracurricular and community activities and stated career goals.

The Doctor of Philosophy Degree. The PhD in business administration is an interdepartmental program in the Spears School of Business, including accounting, entrepreneurship, finance, management, management science and information systems and marketing. The degree emphasizes flexibility to meet the particular needs and objectives of individual candidates. The program is designed to provide the highest degree of preparation for the individual student, enabling him or her to make significant professional contributions in research, teaching or business or governmental positions.

**Requirements.** Students select one major area of study from either accounting, entrepreneurship, finance, management, management information systems/ management science or marketing, and two minor areas. The dissertation is usually written in the student's major area. One of the minor areas must be taken in the Spears School of Business. The second minor may be taken from another department within the Spears School of Business or from a department outside the Spears School.

All candidates for the PhD degree in business administration are expected to have a basic competence in all the major functional areas of business administration—accounting, economics, finance, management, management information systems/management science and marketing. In addition, basic competence is expected in finite mathematics, calculus and statistics. Students who possess a recent master's degree in business from a program accredited by the Association to Advance Collegiate Schools of Business (AACSB International) will generally have satisfied most of the basic competence requirements in these areas.

Administration. The program is administered by the dean of the Graduate College and the department in which the student enrolls with the assistance of a faculty advisory committee.

Major and Minor Areas. The candidate's advisory committee is responsible for assisting in the development of a plan of study that assures competence in the major and minor areas and in economics and quantitative analysis. All PhD students in residence are required to do teaching or research on a half-time basis while earning the degree.

For additional information about the PhD see the respective departments.

# **Economics and Legal Studies in Business**

Lee Adkins, PhD—Professor and Head

Economics is a science of choice. The study of economics centers around individuals' attempts to improve their living standards. It provides a comprehensive view of how a society is organized to transform the limited resources available into want-satisfying goods and services. It investigates the principles underlying the operation of the economic system and seeks to determine its weaknesses and to prescribe policy measures that will improve its operation. In the process, it ranges over a host of the most important problems confronting contemporary society—the causes of and remedies for economic depression and inflation, the determinants of and methods for improving income distribution, poverty problems and welfare measures, the role of the government in economic activity, the requisites for economic growth and development, pollution and congestion and their control.

The primary objectives sought in the undergraduate curriculum are to develop a broad understanding and perspective of the economic aspects of people's activities coupled with thorough training in the fundamental tools of economic analyses. Toward these ends, the development of elementary mathematical and statistical skills is highly desirable, as is complementary study in the social and behavioral sciences, accounting and business administration.

A major in economics prepares students for positions with business firms, non-profit private organizations and national or international government agencies. A degree option in business economics and quantitative studies is offered to provide additional training in analytical methods and communication skills for both public- and private-sector occupations. The undergraduate degree in economics also provides an excellent background for studying law or international relations and, to this end, there is a pre-law option and an international economic relations option. A student interested in pursuing graduate studies in economics should include a wide range of math courses in their undergraduate curriculum.

**General Business.** The general business program gives students a broad, comprehensive type of business education preparing them to enter employment in a wide range of administrative positions in private business, government or non-profit organizations. The scope of their educational experience enables these graduates to assume management positions in organizations of varying sizes and ranges of operations.

Students majoring in general business will take general education or foundation course work in behavioral and social sciences, communications, humanities and fine arts, natural science, mathematics and statistics, as well as business foundation courses in accounting, business communications, business law, economics, finance, management information systems, management and marketing.

This major, which provides for a high degree of individual student choice, includes required upper-division course work beyond the business core in each of the business disciplines as well as substantial work in business or business-related courses, selected by the student in consultation with his or her major adviser. A pre-law option is offered.

#### **Graduate Programs**

The department offers work leading to the Master of Science degree and the Doctor of Philosophy degree. The graduate program in economics prepares economists for academic careers as well as research and administrative positions in business and government agencies.

Graduate fields of specialization include regional and urban economics, international economics and economic development. In addition, graduate courses are offered in energy economics and econometrics.

The initial admission to a graduate program is determined by the graduate studies committee on the basis of the applicant's previous academic record; verbal, quantitative and analytical scores of the Graduate Record Examination and three letters of recommendation.

The Master of Science Degree\*. Admission to the master's program in economics is granted to college graduates with superior academic records. Students must have an undergraduate economics degree, be well grounded in economic theory, and have an excellent mathematical background. A total of 30-33 graduate credit hours are required to earn an MS in economics.

Each graduate student is guided in the preparation of a plan of study by the graduate adviser. At the master's level, there are two options. One provides the student with a well-rounded program that does not specialize in a particular area of economics. The second option is applied economics, which stresses communication skills, quantitative analysis and course work from other disciplines related to a career objective. The candidate for the master's degree is required to show competence in basic economic theory and statistical methods, together with an understanding of the fundamental institutional operations of the United States economy.

A research report or thesis is required of all students who take only the MS degree. A foreign language is not required.

\*Our MS in Economics is not subject to AACSB accreditation because Economics program are often taught in either business colleges or arts and sciences colleges.

The Doctor of Philosophy Degree\*. Admission to the doctoral program in economics is granted to college graduates who have superior academic records. A total of 60 graduate credit hours are required to earn a PhD with a previously earned MS degree. A total of 90 graduate credit hours is required to earn a PhD without a previously earned MS.

The PhD program stresses balanced preparation in economic theory, mathematics and statistics, as well as competence in subject-area fields of specialization. The student is required to pass qualifying examinations in the theory core and in one field of specialization. (The theory core is not considered a field of specialization.) Competence must be demonstrated in a second field of specialization through course work. The graduate adviser helps the student develop a plan of study to achieve these objectives. A foreign language is not required.

A dissertation based upon original research is required of the candidate for a PhD degree in economics. The final oral examination is the dissertation defense.

\*Our PhD in Economics is not subject to AACSB accreditation because Economics programs are often taught in either business colleges or arts and sciences colleges.

#### School of Entrepreneurship

Bruce Barringer, PhD—Professor and Head

The 21st century is the age of entrepreneurship. It is a time of dynamic change where organizations must be faster, more adaptable and flexible, more aggressive, and more innovative in order to survive. The program in entrepreneurship helps prepare students for the entrepreneurial age. Students are encouraged to recognize and develop their innate entrepreneurial potential, and to apply an entrepreneurial mindset to both their professional and personal lives. The program emphasizes the role of entrepreneurial attitudes and behaviors in a wide variety of contexts, including new start-up ventures, growth-oriented small firms, family firms, non-profit entities, and public sector organizations. Students are further encouraged to apply entrepreneurial thinking and acting within other disciplines, from architecture and engineering to social work and theatre.

Entrepreneurship is approached as opportunity-driven behavior. It is a process where individuals put resources together in new and novel ways to create value. The value created can be for customers in conventional markets, or it can be social value created for the community. The program centers on helping students develop competencies that will enable them to be more entrepreneurial in a wide variety of contexts. Eleven core competencies are emphasized, including recognizing opportunity, assessing opportunity, mastering your creativity, leveraging resources, guerrilla skills, mitigating and managing risk, planning when nothing exists, innovation---developing ideas that work, building and managing social networks, the ability to maintain focus yet adapt, and implementation of something novel or new. A leading-edge entrepreneurship curriculum is built around these competencies.

As a field of study, entrepreneurship helps students see themselves as agents of change, and better equips them to implement creative solutions to emerging opportunities in literally any organizational context. To foster these abilities, the program places considerable emphasis on experiential learning. Innovative experiential opportunities are built into each of the entrepreneurship courses at the undergraduate and master's levels. In addition, the School manages two incubators, where students can start ventures, a dormitory for students interested in creativity, innovation and entrepreneurship, a campus-wide business plan, and other student engagement initiatives.

In addition to graduate offerings, the program offers an undergraduate major and minor in entrepreneurship as well as a cross-campus program involving the integration of entrepreneurship into other disciplines (e.g., engineering, art, psychology). More information about entrepreneurship at OSU can be found at entrepreneurship.okstate.edu.

#### **Graduate Programs**

The School of Entrepreneurship offers work leading to the Master of Science in Entrepreneurship degree, including both a residency and online program. In addition, concentration in Entrepreneurship is offered as part of the Master of Business Administration. A PhD in business administration with concentration in entrepreneurship is available to prepare students for careers in academia.

#### The Master of Business Administration (MBA) Degree with Entrepreneurship Concentration. (See "Business Administration")

Master's in Entrepreneurship. The Master's in Entrepreneurship (MSE) provides a rigorous immersion into the nature of entrepreneurship and the entrepreneurial process. Core content is coupled with a strong commitment to experiential learning. Students actually start a venture while in the program. The program is a component of the university-wide entrepreneurship emphasis at Oklahoma State University. It is targeted to students with a passion for entrepreneurship in for-profit, non-profit, and public sector contexts.

The master's program consists of 33 credit hours of coursework and can be completed in one calendar year. The application for admission to the program requires (1) Bachelor's degree, (2) Proposal for a venture, (3) GMAT (recommended but not required), (4) Entrepreneurial and other work experience (recommended but not required), (5) three letters of recommendation. Based on this review, a personal interview is arranged with selected candidates, and then a final acceptance decision is made. Applicants are responsible for ensuring all relevant materials are submitted to the School prior to deadlines. An online version of the program is also available. To learn more, go to entrepreneurship.okstate.edu/academics/graduate/.

The Doctor of Philosophy Degree. The PhD in business administration with concentration in entrepreneurship is primarily focused on producing scholars who will be thought leaders in the discipline of entrepreneurship. The program prepares students primarily for careers in academia. Coordinated by the School of Entrepreneurship, students are given an intense exposure to theory and research methods.

The doctoral program involves sixty credit hours beyond the master's degree, of which forty-two hours are course work, and the remaining hours are associated with dissertation work. It is a four-year program, with two years devoted to course work, followed by comprehensive exams and a dissertation proposal, and then the writing and defending of the dissertation. Students complete fifteen hours of core doctoral seminars in entrepreneurship and management, twelve hours of statistics and research methods courses, nine hours of doctoral or equivalent hours in a minor field, and six hours of approved doctoral-level or equivalent electives. Students typically minor in such fields as psychology, sociology, anthropology, public policy, or finance.

Doctoral students are expected to publish while in the program, and also to teach entrepreneurship courses. Faculty mentors work closely with students on research projects while they are in the program, initially involving the student in ongoing research projects, and ultimately working on projects initiated by the student. Students are expected to develop and refine their research interests over the first two years of the program, culminating in the identification of a dissertation topic. The School of Entrepreneurship, with a world-class cadre of entrepreneurship researchers, is well-positioned to support a wide range of topical areas that fit the student's interests.

Outstanding individuals with master's degrees in any field of study may apply. The application for admission to the program is evaluated based on (1) undergraduate and graduate grade point averages, (2) the student's score on the Graduate Management Admission Test (GMAT), (3) a two- to three-page statement describing career goals, academic interests and research questions that intrigue the applicant, (4) three letters of recommendation, and (5) evidence of research potential. Based on this review, a personal interview is arranged with selected candidates, and then a final acceptance decision is made. Applicants are responsible for ensuring all relevant materials are submitted to the School prior to deadlines. For more information go to

#### entrepreneurship.okstate.edu/academics/graduate/.

#### Finance

John A. Polonchek, PhD-Professor and Head

Financial executives are of central importance to the overall planning, control and success of an organization. There are financial implications in virtually all organizational decisions, whether the organization is a business firm, a non-profit organization or a government. Every manager must have sufficient knowledge of finance to determine the financial implications of their decisions on the organization. With each new innovation in the field of finance- the importance of finance for an organization has grown.

Finance has evolved from a descriptive discipline in the early 1900s to the analytical discipline we find today. Finance theoreticians use fundamental economic theory to develop valuation models and the tools of financial analysis and risk management that are used by finance practitioners to make financial decisions. Finance consists of three interrelated core areas: financial markets and institutions, investments and portfolio theory, and managerial (business) finance. Subsets of these core areas include personal finance, real estate finance, international finance, the management of financial institutions, insurance, entrepreneurial finance, and derivative securities and risk management.

The primary objective of the undergraduate finance curriculum is to produce graduates who have a broad understanding of the financial aspects of their decisions and actions and who are capable of utilizing the fundamental tools of financial analysis. Toward these ends, the development of elementary mathematical and statistical skills and the study of economics, accounting and business administration are needed to accomplish the objective. The major in finance should prepare students for positions that require special understanding of financial analysis, financial management and financial systems in a wide variety of organizations.

A career in financial management can begin in one of several positions that may lead to a major executive position, including chief executive officer. Initial positions in the managerial finance area include capital budgeting analyst, cash manager, credit analyst, financial analyst (who works closely with accountants), and risk manager. Alternatively, finance majors may choose to enter the financial services industries. Finance majors could enter the workforce in the banking industry as a loan officer, or as a member of the trust department; in the securities industry as a securities analyst, as an investment banker, as a stockbroker or account executive, or as a financial planner; and in the insurance industry as an agent or underwriter.

#### **Graduate Programs**

Concentrations in finance are offered through the Master of Business Administration, Master of Science in Quantitative Financial Economics and Doctor of Philosophy degrees.

The Master of Business Administration (MBA) Degree. (See "Business Administration.")

The Master of Science in Quantitative Financial Economics Degree. The discipline of quantitative finance has evolved tremendously in recent years, spurred by business and financial institution demand for quantitative skills. Oklahoma State University offers a Master of Science Degree in Quantitative Financial Economics (MSQFE) to meet this demand. The objective of the MSQFE is to produce graduates with mathematical, statistical and financial modeling skills necessary to support advanced financial and economic decision making.

The MSQFE is a Spears School of Business degree program that draws on the combined expertise of five OSU departments—Finance, Economics, Mathematics, Statistics and Agricultural Economics. The program is designed to enable students to participate in decision processes and develop solution techniques for applications encountered in current and future financial environments. The program focuses on the analytical methods necessary for effective participation in the fields of investment management, risk management, and financial engineering. Significant course work is devoted to the development of mathematical and statistical skills. These skills are necessary to evaluate the uncertain outcomes found in financial applications. The program provides students the opportunity to apply their knowledge and skills to projects that utilize quantitative financial tools and techniques. The MSQFE program seeks to develop student competencies in risk evaluation methods, empirical estimation techniques, valuation theory and techniques, mathematical solution methods, capital budgeting, demand analysis and risk management.

The MSQFE is a 33 credit hour program. The core 24 hours consists of classes required of all students in the program. Students may elect to complete a master's thesis. This option would reduce the number of elective hours from nine to three.

The admission requirements include an earned undergraduate degree from a college or university of recognized standards. In addition to the Oklahoma State University Graduate College's standard requirements, the program's Curriculum Committee will consider the applicant's letters of recommendation, GMAT or GRE score, previous academic performance and financial/statistical modeling experience. The background necessary to complete the program with only 33 hours of course work includes ten hours of calculus, differential equations, statistical methods, intermediate microeconomics and principles of finance.

Additional information about the program is available on the Internet at spears.okstate.edu/msqfe/.

The Doctor of Philosophy Degree. A PhD in business administration with concentration in finance prepares the student for careers in academia, business or government.

The program is designed to meet the needs and objectives of individual students but all students will seek an in-depth understanding of the theoretical foundations of financial economics, and develop research competency and teaching skills. The small class size provides a supportive environment conducive to the exchange of ideas and the development of new insights by both faculty and students.

Students will select finance as their major area of study. Two areas of concentration are also to be selected. As support for the major field of study, each student is required to attain graduate-level competence in economic theory and quantitative methods.

Prerequisites for admission to the program are appropriate basic courses in accounting, calculus, statistics, and econometrics.

Competence in planning and executing research is demonstrated by a dissertation. In addition, each candidate must pass comprehensive qualifying examinations and a final oral examination on the dissertation itself.

Outstanding students with degrees in any field of study may apply. Applications for admission are evaluated on the basis of (1) undergraduate and graduate grade-point averages, (2) score on the Graduate Management Admissions Test, (3) a two- or three-page statement describing goals and academic interests, (4) at least three letters of recommendation, (5) evidence of research potential and (6) a personal interview when feasible. It is the applicant's responsibility to see that all materials related to these criteria are received by the Department of Finance.

#### Management

James M. Pappas, PhD—Associate Professor and Head

The purpose of organizations is to channel the efforts of individuals to accomplish goals working together in a meaningful way to realize success in business or in solving pressing social problems requiring skilled managers.

The field of management is concerned with applying social, psychological and economic theories of human behavior to the real-world problems of designing organizations leading and motivating employees, planning effective courses of action and efficiently allocating resources. Since the field of management deals with real-world problems, students should have an interest in acquiring a deep

understanding of human behavior and applying this knowledge in a variety of different contexts to create value for themselves and others.

The Department of Management offers an undergraduate major in management with options in human resource management (HRM), sports management and business sustainability. The department also offers graduate studies leading to an MBA degree or a PhD degree. The disciplines spanned by these degrees offer dynamic, exciting career possibilities to students at all levels.

**Management.** Undergraduate students should look forward to both intellectual growth and the development of management skills that are in high demand in today's competitive business world.

The Management major, as well as the three optional specializations, are concerned with the analytical process and the application of decision tools and relevant theory to creative problem solving. While the topics vary from one option to another, the common thread running through the Management major is the rational process of managing organizations, solving problems and accomplishing goals.

The major in management offers dynamic, exciting possibilities for study and employment by preparing students for leadership positions in all types of organizations. Some examples of topics include leadership, strategic management, planning courses of action, organizational behavior, resource allocation and administration. Students with degrees in management are employed by organizations of all types and sizes as managers or staff specialists. The major has flexibility so that the student may include coursework from any of the other business disciplines. The management major is a good choice for those interested in for profit leadership roles in business, non-profit and public sector organizations.

**Option in Human Resource Management.** Students in the human resource management option study topics pertaining to the management and wellbeing of an organization's workforce, including compensation administration, forecasting demand for personnel, labor relations and collective bargaining, recruitment and selection, and training and development. This option is designed to prepare students for careers in human resource management or for careers that facilitate the attainment of a competitive advantage through human capital. A career as an HRM professional offers many opportunities, such as developing and implementing innovative HR policies and assisting employees with career challenges and opportunities.

Option in Sports Management. Sports enterprises are becoming increasingly concerned with their "bottom line," and they need employees who have business skills as well as expertise in the sports industry. The sports industry includes amateur, college, minor league and professional level sports organizations and is an industry that is growing in importance in our economy and society. Our sports management program is one of the few in the country that is housed within a business management department, so we offer our students the opportunity to gain important business management skills while learning about the unique nature of sports organizations.

**Option in Business Sustainability.** A sustainable enterprise is built around the triple bottom line imperative of protecting and enhancing the current and long-term future of the organization, the quality of life of the people impacted by the organization, and the health of the natural environment. There is a growing need for individuals with training in sustainable enterprise, and the job opportunities for well-trained undergraduates are increasing. The Business Sustainability option prepares students for this growing and exciting field with extra class work in business ethics, corporate social responsibility, and sustainable business practices.

#### Graduate Programs

The Department of Management offers work leading to the Master of Business Administration and the Doctor of Philosophy in business administration degrees.

The Master of Business Administration (MBA) Degree. (See "Business Administration.")

#### **Graduate Certificates**

#### **Certificate in Nonprofit Management**

A growing number of executives in non-profits are recognizing the need to incorporate contemporary management skills into their organizations. This certificate is designed to highlight management practices used in traditional businesses that can also be applied in the nonprofit context and explore the important interface between for-profit businesses and nonprofit organizations.

This certificate is aimed at working professionals who typically join organizations at entry to mid-level management positions without prior business management education. The certificate offers a range of courses that will examine how to apply business practices in nonprofit organizations. Those seeking the graduate certificate will complete 6 hours of required coursework and select another 6 hours of coursework that best fits their situation.

#### **Certificate in Sustainable Business**

A sustainable enterprise is built around the triple bottom line imperative of protecting and enhancing the current and long term future of the organization, the quality of life of the people impacted by the organization, and the health of the planet. A combination of factors has made a focus on sustainability no longer an option for organizations—whether public, private, or governmental. First, from a cost perspective, managers must recognize that their actions (whether

proactive or inactive) that negatively impact people (e.g., its shareholders, employees, customers, communities) can lead to lawsuits. Similarly, by reducing the waste that harms the planet, organizations can minimize costs. Second, from a revenue perspective, the development of green products can provide a competitive advantage in the marketplace. Third, from an ethical perspective, it is simply the right thing to do to protect the planet as well as present and future generations of people from the negative externalities of an organization's actions. We are building these ideas into both our undergraduate and graduate management programs.

This certificate is aimed at working professionals and offers a range of courses that will examine how to apply business practices to sustainability practices in business. Those seeking the graduate certificate will complete 6 hours of required coursework and select another 6 hours of coursework that best fits their situation.

**The Doctor of Philosophy Degree.** The PhD in business administration program administered through the Department of Management prepares students for a career in university research and teaching.

The program is flexible and individually structured to meet the needs and objectives of the candidate. Emphasis is placed on understanding the psychological, social and economic foundations of business administration and developing the analytical skills to publish research in the management specialties of organizational behavior, human resources and strategic management.

PhD students in management concentrate in either organizational behavior or strategic management and pursue two minors. At least one of the minor areas must be taken in the Spears School of Business. As support for the major and minor fields of study, each student is required to attain graduate-level competence in quantitative research methods.

As prerequisites to the program, all candidates must have completed appropriate basic courses in calculus and statistics. In addition, candidates are expected to have a basic competence in the major functional areas of business—accounting, finance, management, management information systems, management science and marketing. Competence in the functional areas is usually demonstrated through the completion of appropriate graduate courses in each area through a program accredited by the Association to Advance Collegiate Schools of Business (AACSB International).

Competence in planning and executing research must be demonstrated in a dissertation. In addition, each candidate must pass a series of comprehensive qualifying examinations, both written and oral, and a separate, final oral examination of the dissertation itself. To enhance teaching skills, all PhD students in residence are required to teach on a quarter-time or half-time basis for at least one semester while earning the degree.

Outstanding students with master's degrees in any field of study are encouraged to apply. The application for admission to the program is evaluated on the basis of (1) undergraduate and graduate grade-point averages, (2) the score on the Graduate Management Admissions Test, (3) a two- or three-page statement describing research interests, (4) three letters of recommendation, (5) evidence of research potential and (6) a personal interview when feasible. It is the responsibility of each applicant to ensure that all material related to the above criteria is received by the department.

# **Management Science and Information Systems**

Rick L. Wilson, PhD—Professor and Head

There is little doubt that emerging technologies of the 21st Century will continue to alter dramatically the way business is conducted. Those who wish to have a leadership role in developing next generation systems should consider a career in information systems and telecommunications. The need for knowledgeable workers with expertise in information systems will continue to increase at substantial rates for the foreseeable future. In fact, a Department of Labor forecast projected that a bachelor's degree in the management science and information systems area will prepare students for five of the top eight fastest growing occupations over the next decade.

The Department of Management Science and Information Systems offers an undergraduate major in management information systems (MIS) with possible options of management science and computer systems (MSCS) and information assurance (IA). It also offers graduate studies leading to master's degrees in telecommunications management (MSTM) and management information systems (MIS). Also, PhD degrees in business administration with an option in MIS, telecommunications management, management science and operations management can be earned.

Undergraduate degrees in MIS require a common foundation of work in disciplines such as mathematics, statistics, behavioral sciences and communications. A second tier of required work consists of the courses required for all Spears School of Business students such as economics, marketing, accounting and management. The third tier of classes are core MIS courses that develop information technology expertise in students.

Management Information Systems (MIS). The MIS degree focuses on the business applications of information technology. This includes emphasizing necessary skills required in the analysis, development, evaluation and implementation of various information and communication technologies critical for today's Internet-enabled organizations. The integration of information technology throughout all aspects of business coupled with the critical need for responsive information systems has created a strong demand for graduates with expertise in information systems and business administration.

Once MIS students satisfy the first two tiers of requirements mentioned above, they will focus on specialized courses in areas such as systems analysis and design, business programming, database design and management, expert and decision support systems, data mining applications, data communications and network security, management science methods, enterprise resource planning systems and electronic commerce.

**MSCS.** The MSCS option allows developing aptitudes in quantitative tools that are especially critical in today's data-driven organization. Additional course work in statistics, operations research, decision analysis and quantitative analysis is possible with an MSCS option.

Information Assurance. The Information Assurance option uses the expertise in the department that led OSU to be named a National Center of Academic Excellence in Information Assurance Education and Research by the NSA and the Department of Homeland Security. This option provides students with indepth study and hands-on analysis of critical organizational issues in information assurance and security.

#### Graduate Programs

The Department of Management Science and Information Systems offers courses that lead to the completion of the Master of Business Administration (MBA), the Master of Science in telecommunications management (MSTM), the Master of Science in management information systems (MIS) and the Doctor of Philosophy in business administration (PhD).

The Master of Business Administration (MBA) Degree. (See "Business Administration.")

#### The Master of Science in Telecommunications Management (MSTM) Degree. 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 not only through traditional means to on-campus students but also via distance learning technologies to students at remote locations.

The program is currently housed in the Spears School of Business. However, the telecommunications management program draws on the combined expertise of three OSU colleges—the College of Arts and Sciences, the Spears School of Business 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 32-33 credit hours, including eight core courses and three 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 complete it in two years.

MSTM degree candidates have the opportunity to develop broad knowledge in specific elective areas chosen to best fit their career aspirations.

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 consider students' letters of recommendation, GMAT or GRE scores, previous academic performance and telecommunications experience.

Information about the program is available on the Internet at **spears.okstate.edu/graduate/mstm**.

The Master of Science in Management Information Systems (MIS) Degree. This degree program combines strong theoretical concepts with intense handson instruction, helping graduates not only to understand business processes and the concepts behind the information systems they work with, but also develop, modify, use and protect these rapidly-changing computing systems through their technical expertise.

The MS in MIS is a 33-34 hour program featuring a core of 19 hours (18 for part time), including a business practicum, plus three options to highlight different interest areas: digital business systems, knowledge management systems and information assurance and security. These three options afford the student opportunities, respectively, to focus on software design and implementation, information retrieval and analysis or management of network and information system security to protect information systems against unauthorized intrusion.

Admission requirements for the MS in MIS are similar to the admission requirements for the other master's programs in the Spears School of Business. Information about the program is available on the Internet at spears.okstate.edu/graduate/msmis/.

The Doctor of Philosophy (PhD) Degree. The PhD in business administration program administered through the Department of Management Science and Information Systems provides intensive study in management information systems, management science, operations management and telecommunications management. It prepares the student for significant professional contributions in university teaching and research.

The program is flexible and individually structured to meet the needs and objectives of the candidate. Emphasis is placed on understanding the analytical and theoretical foundations of business administration, applications in the depth area of specialization and development of research capabilities in the discipline.

As prerequisites to the program, all candidates are to have completed appropriate basic courses in calculus and statistics. Likewise, candidates are expected to have a basic competence in the major functional areas of business– accounting, finance, management, management information systems, management science and marketing. Competence in the functional areas is usually attained by documenting that the student has recently completed the appropriate graduate courses in each area through a program accredited by the Association to Advance Collegiate Schools of Business (AACSB International).

Competence in planning and executing research must be demonstrated in a dissertation. In addition, each candidate must pass a series of comprehensive qualifying examinations, written and oral, and a separate, final oral examination of the dissertation. To enhance teaching skills, all PhD students in residence are required to teach on a quarter-time or half-time basis for at least one semester while earning the degree.

Outstanding students with master's degrees in any field of study may apply. The application for admission to the program is evaluated on the basis of (1) undergraduate and graduate grade-point averages, (2) the score on the Graduate Management Admissions Test, (3) a two- or three-page statement describing goals and academic interests, (4) three letters of recommendation, (5) evidence of research potential and (6) a personal interview when feasible. It is the responsibility of each applicant to ensure that all material related to the above criteria is received by the department.

# Marketing

Joshua L. Wiener, PhD—Professor and Head

The Department of Marketing provides two quite significant majors within the Spears School of Business. One of these is marketing. This is an exciting field of study leading to a variety of job opportunities both in the private sector and in not-for-profit organizations. Also, it provides an excellent career path to top management within an organization.

The second major provided by the department is international business. Almost every business has international operations or is affected by events, competitors and conditions in the global economy. This opens career opportunities in the field and prepares one for successful management within the domestic economy.

**Marketing.** Marketing is concerned with the identification of wants and needs by buyers and the development of products, distribution channels, price and communication methods to satisfy those wants and needs. The buyers may be individuals or organizations, and their buying may include products or services. Since the economic system is dependent on the ability of organizations to match resources with marketplace needs, marketing is gaining in prominence every year.

A marketing graduate will likely be involved in performance and management of many traditional areas of decision-making—sales, advertising, logistics and marketing research. In addition, one frequently assists in product planning, developing marketing information systems and general management. Since these tasks are necessary for all types of organizations, employers of marketing graduates include manufacturers, banks, hospitals, retailers and not-for-profit organizations.

The effective marketing manager must possess a perspective and capability that reflect a three-dimensional program of study: (1) a liberal education in the sciences, humanities, behavioral and social sciences, mathematics and communications; (2) an adequate knowledge of the major functional areas of business and (3) a high-level competency in marketing.

One's liberal education is emphasized during the freshman and sophomore years. The study of the functional areas of business begins in the sophomore year and continues into the junior year. During the junior and senior years, the focus is on marketing. In addition to the introductory course that provides an overview of the field of marketing, the student takes courses in areas such as consumer behavior, promotion, sales management, services marketing, electronic commerce, marketing research, channels and international marketing. While studying marketing, one typically selects courses in other fields such as international business, management, information systems, finance, advertising and public relations to support a particular career choice within the marketing field.

Certificate in Customer – Employee Interaction. Interactions between frontline employees and their customers form the building blocks from which businesses are made. Many undergraduate students join organizations at entry-level positions where the focus is on customer-related activities, including sales, retail, and customer service. Such training will benefit not only students who upon graduation begin careers in retailing, sales or customer service, but also those who will eventually practice law, medicine, or own their own business where successfully managing customer interactions forms the foundation for success.

The certificate offers a range of courses to give specialized training on effective customer interaction. All required coursework fits within the structure of the marketing undergraduate degree program. Those seeking the certificate will complete 9 hours of required coursework and select another 6 hours of coursework that best fit their particular interests.

#### Graduate Programs

The Department of Marketing offers work leading to the Master of Business Administration and the Doctor of Philosophy in business administration degrees. In addition, the Department of Marketing in conjunction with the Management Science and Information Systems department offers work leading to SAS/OSU Data Mining Certificate and Graduate Certificate in Business Data Mining.

# The Master of Business Administration (MBA) Degree. (See "Business Administration.")

The Doctor of Philosophy Degree. The PhD in business administration program through the Department of Marketing provides intensive study in marketing. It prepares the student for significant professional contributions in university teaching and research or staff positions in business or government.

The program is quite flexible and individually structured to meet the needs and objectives of each candidate. The program is designed to create scholars and researchers in the field of marketing. Highly student oriented, the program focuses on training individuals in current marketing theory and research techniques. Collaboration between students and faculty is strongly encouraged.

**Program Content.** The student will take 15 hours of PhD seminars in marketing. The student must also complete a nine-hour minor in another discipline such as economics, management, sociology or psychology. As support for the major and minor fields of study, extensive course work (normally 18 credit hours) in the area of quantitative/research methodology is required.

As prerequisites to the program, all candidates are to have completed appropriate basic courses in calculus and statistics. Likewise, candidates are expected to have a basic competence in the major functional areas of business— accounting, finance, operations management, organizational theory, economics and marketing. Competence in the functional areas is usually assumed for candidates having recently completed an appropriate graduate course in each area in an MBA program accredited by the Association to Advance Collegiate Schools of Business (AACSB).

Application Procedure. Outstanding undergraduate or graduate students from any field of study may apply. For those with an MBA, the program will normally consist of two years of course work and two years of dissertation work. For those without a master's degree, the plan of study for the PhD degree will typically allow for the granting of an MBA prior to completion of the PhD degree. Applications for admission to the program are evaluated on the basis of (1) undergraduate and graduate grade-point averages, (2) the score on the Graduate Management Admissions Test or Graduate Record Examination, (3) a two- or three-page statement describing goals and academic interests, (4) three letters of recommendation, (5) evidence of research potential and (6) a personal interview when feasible. It is the responsibility of each applicant to ensure that all materials related to the above criteria are received by the Department of Marketing. Application forms and detailed explanation of the PhD degree in business administration with an emphasis in marketing are available through the department.

SAS and OSU Data Mining Certificate. In the last ten years due to rapid advances in computing power and the availability of massive data bases, there has been a strong demand for students trained in the area of data mining. In response to this demand, the Department of Marketing, with the active support of the Department of Management Science and Information Systems (MSIS) partnered with SAS, a leading provider of data analysis and data mining software, to offer graduate students with technical backgrounds an opportunity to earn a SAS/OSU data mining certificate by taking 12 credit hours of graduate courses offered by Marketing and MSIS faculty.

**Program Content.** The program curriculum (developed in partnership with SAS) focuses on establishing an understanding of the functionality of large databases, the methods used to access and manipulate data from such databases, and the methods used to analyze data patterns (both statistical and non-statistical), make predictions/forecasts and interpret such analyses in the context of business applications. Established courses from the Marketing Department and the MS in MIS program curriculum along with some newly-developed courses, including hands-on courses to build actual experience in mining large databases, give students the opportunity to develop relevant skills in data mining. Students take 6 credit hours of core courses and 6 credit hours of approved elective courses.

More details about this program are available on the website: http://spears.okstate.edu/sasosu.

Graduate Certificate in Business Data Mining. This certificate program is modeled after the SAS/OSU Data Mining Certificate except the intended target audience for this certificate are working professionals with technical backgrounds who may not want to pursue a full blown masters program but are willing to enhance their data mining skills by taking focused courses. The classes in this program are offered via the distance-learning (online) mode enabling non-traditional working professionals to complete the graduate certificate in business data mining while continuing to work.

**Program Content.** The program curriculum (developed in partnership with SAS) is similar to the SAS/OSU Data Mining Certificate curriculum. The core courses are the same between the two programs, but the elective courses are somewhat different. Students take 6 credit hours of core courses and 6 credit hours of approved elective courses.

More details about this program (including procedure and admission requirements) are on the website: http://watson.okstate.edu/datamining/.

SAS and OSU Marketing Analytics Certificate. This certificate is designed for business professionals with non-technical backgrounds or MBAs to educate them about marketing applications of contemporary data analysis techniques without emphasizing programming aspects.

**Program Content.** The program curriculum (developed in partnership with SAS) balances the need for understanding applications of quantitative and statistical modeling along with data visualization, data exploration and interpretation. Hands-on courses to build actual experience in using data to make better marketing decisions will give students the opportunity to develop relevant skills in marketing analytics. Several new courses from the Marketing department and some existing courses from the Marketing and MSIS department are in the program. Students take six credit hours of core courses and six credit hours of approved elective courses.

More details about this program are available on the website: http://analytics.okstate.edu/sasanalytics/.

Graduate Certificate in Marketing Analytics. This certificate program is modeled after the SAS and OSU Marketing Analytics Certificate except the intended target audience for this certificate are working professionals with non-technical background who may not want to pursue a full blown masters program but are willing to enhance their marketing analytics skills by taking focused courses. The classes in this program are offered via the distancelearning (online) mode enabling non-traditional working professionals to complete the graduate certificate in business data mining while continuing to work.

**Program Content.** The program curriculum (developed in partnership with SAS) is similar to the SAS and OSU Marketing Analytics Certificate curriculum. The core courses are the same between the two programs, but the elective courses are somewhat different. Students take six credit hours of core courses and six credit hours of approved elective courses.

More details about this program (including procedure and admission requirements) are on the website: http://watson.okstate.edu/marketinganalytics/.

# **International Business**

The major in international business provides a fundamental understanding of the global business environment and develops decision-making capabilities in the international setting. It spans cultures, economic conditions, political and legal systems and competitive climates.

This major has the same General Education and Common Body requirements as all other Spears School majors. In addition, it includes specific international business courses, international environment courses, modest foreign language competency and a minor field in any business field. Students are encouraged to seek study-abroad opportunities and other avenues for expanding their cross-cultural understanding. The international business major requires 39 credit hours.