MANAGEMENT SCIENCE AND INFORMATION SYSTEMS

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 management information systems (MIS) and the Doctor of Philosophy in business administration (PhD).

The Master of Business Administration (MBA) Degree

(See "Business Administration (http://catalog.okstate.edu/spears-business/business-administration/#graduateprogramstext).")

The Master of Science in Management Information Systems (MIS) Degree

This degree program combines strong theoretical concepts with intense hands-on 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 25 hours (24 for part-time), including a business practicum, plus two options to highlight different interest areas: data science and application development. These options afford the student opportunities to focus on descriptive, predictive and prescriptive analytics as well as software design and implementation.

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 https://go.okstate.edu/graduate-academics/programs/masters/management-information-systems-and-information-assurance-ms.html.

Certificate in Health Analytics

There is a dire need for professionals with practical knowledge and skills in health analytics—ones who can convert large data repositories into actionable insight for better decisions to enhance effectiveness and efficiency in the ever more complex and highly competitive health care domain. OSU's internationally ranked MS in MIS program has collaborated with the Center of Health Sciences' MS in Health Care Administration (HCA) program and the Center of Health Systems Integration (CHSI) research center focused on the intersection of health, healthcare, informatics and analytics/data sciences to create a new, unique interdisciplinary program — a Certificate in Health Analytics.

The program requires taking four courses (each three credit hours, totaling 12 credit hours) of coursework. This certificate program allows for the courses to double-count toward a master's degree and this certificate degree.

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 the following:

- 1. undergraduate and graduate grade-point averages,
- 2. the score on the Graduate Management Admissions Test,
- 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.