

# MANAGEMENT SCIENCE, PHD

The Management Science PhD program is a rigorous and high-quality, research-oriented program that offers students an opportunity to specialize in one of six management fields: accounting, finance, information technology management, marketing, organizations & strategic management, and supply chain/operations management. Students may also minor in business statistics, international business, economics, econometrics, or psychology.

The Lubar College of Business Management Science PhD is a *STEM-designated* program. This rigorous program will provide the independent research skills needed to prepare the student for success in academia or a research-related career.

The classes, papers and exams are the formal portion of this apprenticeship. Beyond that, however, much of what the student learns will occur out of the class by attending research colloquia, presenting personal research, holding informal discussions with faculty, working with faculty and others on research projects, and interacting with other PhD students.

Objectives of the Lubar PhD program include effectively analyzing research questions in the area of specialization, demonstrating research competence, developing teaching skills, and establishing an independent, high quality research record.

The degree requires a minimum of 34 credits beyond the master or 54 credits beyond the baccalaureate, including a dissertation. The student must also satisfy a residence requirement.

## Admission Requirements

### Application Deadlines

Application deadlines vary by program, please review the application deadline chart (<http://uwm.edu/graduateschool/program-deadlines/>) for specific programs. Other important dates and deadlines can be found by using the One Stop calendars (<https://uwm.edu/onestop/dates-and-deadlines/>).

### Admission

Management Science PhD applications must be received by January 1 for admission to the following Fall semester. The application package must be complete and all materials received by February 1. All applications are reviewed in mid-February for the upcoming academic year starting in September.

Applicants must meet Graduate School requirements (<http://uwm.edu/graduateschool/admission/>) plus the following program requirements to be considered for admission to the program:

- A bachelor's degree from an accredited college or university. Almost all applicants admitted, however, are master's degree holders.
- Substantial evidence of scholarly potential and commitment.
- Submission of score on either the Graduate Management Admission Test (GMAT) (<http://uwm.edu/graduateschool/admission/#gmat>) or the Graduate Record Examination (GRE) (<http://uwm.edu/graduateschool/admission/#gre>).
- Two letters of recommendation in support of the candidate's competence to do doctoral work.
- A written statement from the applicant stating reasons for pursuing PhD level study and an indication of the major field to be studied.

Applicants are expected to have adequate preparation at the undergraduate or graduate level equivalent to one semester each of coursework in calculus, statistics, and linear algebra. Applicants who do not have the above background must complete equivalent courses. Specific courses from the Lubar College of Business or from departments outside the College will be suggested to satisfy preparation in these areas. These courses do not count toward credit requirements for the degree. As some areas of study admit students for alternating academic years, please review the following Lubar College of Business Website (<http://uwm.edu/business/academics/doctoral/admissions/>).

### Reapplication

A student who has received a master's degree in Business Administration from the University of Wisconsin-Milwaukee must formally reapply for admission to the Graduate School before beginning studies toward the PhD degree.

## Credits and Courses

Minimum degree requirement is 54 credits beyond the bachelor's degree, of which a minimum of 34 credits must be earned in residence at UWM beyond the master's level.

The student plans an individual program of studies in consultation with the major professor. The program has no formal language requirement but the student is responsible for familiarity with published literature in the area of the student's research. All students will also be required to complete an "Orientation to Teaching and Research" course.

Code	Title	Credits
BUS ADM 900	Doctoral Orientation to Teaching and Research	1
Minimum 12 credits of research methods courses		12
Minimum 12 credits in student's major field		12
Minimum 9 credits in student's minor field of study		9
Electives and BUS ADM 997		20
<b>Total Credits</b>		<b>54</b>

### Stage 1

The first stage of the student's program includes general preparation in a common core of knowledge. Students will be required to validate exposure to functional business areas: accounting, finance, information systems, marketing, and management. Method of validation is to be decided by the advisor and faculty from the major field area.

### Stage 2

The second stage of the program consists of a required research methods component to be satisfied by a minimum of 12 credits from a recommended list of research methods courses.

### Stage 3

The third stage of the program consists of coursework and research in the major and minor fields of study as specified in the student's program of studies. Coursework must include a minimum of 12 credits in the student's major field and a minimum of 9 credits in the student's minor field of study.

As a first step in developing a research focus, PhD students are required to submit a paper by the end of their third semester to be presented at a research seminar, conference, or an on-campus seminar that includes at least two faculty members from their department.

If a student fails to complete the research paper requirement, he/she will be subject to dismissal from the doctoral program for lack of progress toward degree.

## **Additional Requirements**

### **Major Professor as Advisor**

The student must have a major professor to advise and supervise the student's studies as specified in Graduate School regulations. Within the first semester, the student arranges for assignment to an advisor within the student's specialization.

### **Residence**

The student must meet minimum Graduate School residence requirements.

### **Doctoral Preliminary Examinations**

The student must pass written doctoral preliminary examinations in the major field of study. Minor field requirements include completing approved coursework with a specified grade point average or passing a written examination as specified by the appropriate department. A student is admitted as a candidate for the Ph.D. degree after successful completion of the doctoral preliminary examinations.

### **Dissertation**

The candidate must write a dissertation that demonstrates ability to formulate a research topic and pursue independent and original investigation.

### **Dissertation Defense**

A formal oral defense of the dissertation by the student and certification of the dissertation by the dissertation committee are necessary steps to complete the degree requirements.

### **Time Limit**

All degree requirements must be completed within 10 years from the date of initial enrollment in the doctoral program.

Additional information on Graduate School PhD requirements is on the Graduate School website (<http://uwm.edu/graduateschool/doctoral-requirements/>).