MS in Business Analytics

Admission Requirements
Applicants are considered on an individual basis. In addition to the Graduate College minimum requirements, applicants must meet the following program requirements:

- **Baccalaureate Field** Individuals from all baccalaureate fields are encouraged to apply. The exact course requirements will be determined based on an individual’s baccalaureate field and work experience. All applicants must have had the following background course work: mathematics through the level of calculus covering integration and differentiation, and statistics through regression analysis.

- **Grade Point Average** At least 3.00/4.00 for the final 60 semester hours (90 quarter hours) of undergraduate studies. Applicants with a master’s degree must have maintained a GPA of at least 3.00/4.00 in that program.

- **Tests Required** GMAT or GRE taken within five years of entry into the program.
  - UIC and UIUC students or alumni (graduated within five years of applying) with a cumulative GPA of 3.00/4.00 and a GPA of 3.00/4.00 in selected IDS-related courses will be waived from the GMAT or GRE requirement.

- **Minimum English Competency Test Score**
  - **TOEFL** 80, with subscores of Reading 19, Listening 17, Speaking 20, and Writing 21 (iBT Test); 60, with subscores of Reading 19, Listening 17, Writing 21 (revised Paper-Delivered Test), OR,
  - **IELTS** 6.5, with subscores of 6.0 for all four subscores, OR,
  - **PTE-Academic** 54, with subscores of Reading 51, Listening 47, Speaking 53, and Writing 56.

- **Letters of Recommendation** Two required.

- **Personal Statement** Required.

Degree Requirements
In addition to the Graduate College minimum requirements, students must meet the following program requirements:

- **Minimum Semester Hours Required** 32.

- **Course Work** No more than two 400-level courses may be used to count toward degree requirements.

- Students entering the program with sufficient background in any of the required core courses may, with the approval of the director of graduate studies, take an advanced analytics elective in its place.

### Code | Title | Hours
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IDS 521 | Advanced Database Management | 
IDS 560 | Analytics Strategy and Practice | 
IDS 572 | Data Mining for Business | 
IDS 575 | Machine Learning and Statistical Methods for Business Analytics |

Electives
Select 16 hours of electives from the following list, with at least 8 hours of analytics electives. Students may choose all 16 hours from analytics electives, or choose up to 8 hours of business analytics electives. Electives must be approved by the director of graduate studies. Based on the student’s background and interests, other analytics-related courses may be taken with the advice and approval of the director of graduate studies.

### Analytics Electives

- **IDS 435** Optimization for Analytics
- **IDS 561** Analytics for Big Data
- **IDS 564** Social Media and Network Analysis
- **IDS 566** Advanced Text Analytics for Business
- **IDS 567** Business Data Visualization
- **IDS 576** Deep Learning and Modern Applications
- **IDS 594** Special Topics in Information and Decision Sciences

Business Electives
Analytics-related business electives approved by the director of graduate studies, such as the following:

- **ACTG 516** Financial Statement Analysis
- **FIN 510** Investments
- **FIN 516** Theory and Structure of Options and Futures Markets
- **IDS 523** Audit and Control of Information Systems
- **IDS 552** Supply Chain Management
- **IDS 573** Risk Management
- **MKTG 561** Consumer Behavior
- **IDS 540** Marketing Analytics

- **Comprehensive Examination** None.

- **Thesis, Project, or Course Work Only Options** Course work only.
  - The required capstone course (IDS 560) ties together the technical material in the core courses and electives with discussion and cases
to address issues related to analytics strategy for organizations and effective analytics practice. This course further integrates this material with project work that involves either detailed study of analytics strategy and practice in organizations, or development of analytics related solutions for specific problems. Such projects, organized as part of the capstone course, can be driven by specific client needs, or framed around problems as currently encountered in practice.