INFORMATION SYSTEMS & ANALYTICS

ISA is an interdisciplinary department that considers how technology can facilitate business decisions to guide organizations to success.

Our curriculum focuses on the intersection of areas like big data and business intelligence and combines theory and strategy with hands-on experience. Courses explore the use of computer information systems and analytical decision-making methods in organizations. Essential to the conduct of business, these skills equip the department’s major and minors to design, implement, and evaluate day-to-day management systems central to an organization’s success.

Nationally Ranked

The Leavey School of Business ISA program is consistently ranked among the top in the nation.

In 2018, U.S. News and World Report ranked the Operations Management program #15 and the Management Information Systems (MIS) program #16 nationally in their Best Colleges ranking. The MS in Information Systems program was ranked #10 nationally in the Best Graduate Information Systems ranking.

The MIS program was ranked #12 in the country and #4 for the highest paid MIS graduates nationally by College Factual.

The MS in Business Analytics program was ranked #3 nationally by TechRepublic.com in their list of the 20 Best Schools to Study Big Data Analytics.

Careers for ISA Department Graduates

The department’s majors and minors may pursue a variety of careers after graduation, including management consulting, systems administration, technical sales and marketing, operations management, and roles as business analysts in public, private, service and non-profit sectors. Past graduates have also gone on to various master’s degree or doctoral programs, as well as law school.

Faculty Research

ISA faculty conduct research in information systems, business analytics, and operations management. Our faculty has wide-ranging impact on society, from artificial intelligence to operations analytics, from social media to supply chain, from information security & privacy to quantitative modeling. Products of their research have appeared in leading academic journals, including Management Information Systems Quarterly, Management Science, INFORMS Journal on Computing, Operations Research, Journal of Management Information Systems, Manufacturing & Service Operations Management, Production and Operations Management, and ACM and IEEE Transactions.
Requirements for the Management Information Systems (MIS) Major*

- **OMIS 30** - Introduction to Programming
- **OMIS 105** - Database Management Systems
- **OMIS 106** - Systems Analysis and Design
- **OMIS 107** - Systems Programming
- **Three courses from** OMIS 111, 113, 114, 116, 117, 118, 120, 135, 137, 150

Requirements for the Accounting & Information Systems (AIS) Major*

- **ACTG 20** - Recording Financial Transactions
- **ACTG 130** - Intermediate Financial Accounting I
- **ACTG 131** - Intermediate Financial Accounting II
- **ACTG 132** - Advanced Financial Accounting
- **ACTG 135** - Auditing
- **ACTG 136** - Cost Accounting
- **ACTG 138** - Tax Planning and Business Decisions
- **OMIS 30** - Introduction to Programming**
- **OMIS 105** - Database Management Systems
- **OMIS 106** - Systems Analysis and Design
- **OMIS 150 or ACTG 155** - Systems Programming / Financial Information Systems
- **One course from** OMIS 107, 111, 113, 114, 120, 135, 137

*In addition to University Core Curriculum and Leavey School of Business requirements for B.S. degree in Commerce.

**AIS majors may use OMIS 30 to satisfy the information systems requirement in the Leavey School of Business curriculum.

Business Analytics Minor

Open to business students only. Requirements for the Business Analytics minor include:
- OMIS 105 - Database Management Systems
- OMIS 109 - Prescriptive Analytics
- OMIS 114 - Data Science with Python
- OMIS 115 - Predictive Analytics
- One course from OMIS 113, ACTG 134, ACTG 155, ECON 173, ECON 174, FNCE 146, FNCE 148, MKTG 182.

Management Information Systems (MIS) Minor***

Requirements for the MIS minor include:
- OMIS 30 - Introduction to Programming
- OMIS 105 - Database Management Systems

***Non-business students minoring in MIS must complete additional requirements. Refer to the Undergraduate Bulletin.