

INFORMATION SYSTEMS AND ANALYTICS

Information Systems and 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 that combines theory and strategy with hands-on experience. As an undergraduate major in Management Information Systems or Accounting & Information Systems (both are STEM-designated), you'll have the chance to design applications in the lab and then put your learning into practice through credit bearing internships. You will take courses that combine theoretical concepts with applications to real-life problems, and participate in labs and projects that will allow you and your peers to work as a group to develop software programs and business applications.

NATIONALLY RANKED

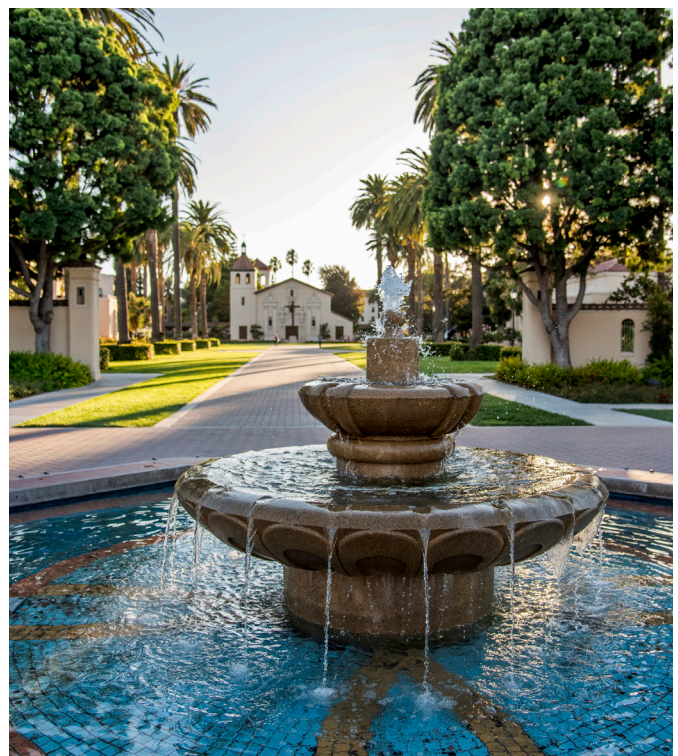
The Leavey School of Business ISA program is consistently ranked among the top in the nation. For 2023, U.S. News and World Report ranked the Business Analytics program #7 nationally in their Best School Specialty Rankings. The Management Information Systems (MIS) program was ranked #23.

CAREERS FOR INFORMATION SYSTEMS & ANALYTICS

Students experience a diverse range of internships, such as risk and financial advisory, data science, assurance and audit analysts, supply chain and operational management. Graduates of the department have pursued a variety of careers after graduation, including management consulting, operations management, technical sales and marketing, and roles as business analysts in public, private, service and non-profit sectors. Some will even continue on to various master's degrees or doctoral programs.

FACULTY RESEARCH

ISA faculty conducts research on information systems, business analytics, and operations management. Their research covers topics ranging from artificial intelligence to operations analytics, from social media to supply chain, from information security and privacy to quantitative modeling. Their research has appeared within leading academic journals, including *Management Science*, *Information Systems Research*, *Management Information Systems Quarterly*, *Operations Research*, *Manufacturing & Service Operations Management*, *Production and Operations Management*, *INFORMS Journal on Computing*, and *IEEE/ACM Transactions*.



Requirements for the Management Information Systems (MIS) Major

<input type="checkbox"/>	OMIS 30	Introduction to Programming with Python
<input type="checkbox"/>	OMIS 105	Database Management Systems
<input type="checkbox"/>	OMIS 106	Systems Analysis and Design
<input type="checkbox"/>	OMIS 107	Systems Programming
<input type="checkbox"/>	Three courses from:	Computer Communications Systems, Data Warehousing and Business Intelligence, Data Science with Python, Applied Machine Learning, Software Development Project, Web programming, Enterprise Resource Planning Systems, Object-Oriented Programming and Financial Information Systems

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

<input type="checkbox"/>	ACTG 120	Accounting Data Analysis and Visualization
<input type="checkbox"/>	ACTG 130	Intermediate Financial Accounting I
<input type="checkbox"/>	ACTG 131	Intermediate Financial Accounting II
<input type="checkbox"/>	ACTG 132	Advanced Financial Accounting
<input type="checkbox"/>	ACTG 135	Auditing
<input type="checkbox"/>	ACTG 136	Cost Accounting
<input type="checkbox"/>	ACTG 138	Tax Planning and Business Decisions
<input type="checkbox"/>	OMIS 30	Introduction to Programming**
<input type="checkbox"/>	OMIS 105	Database Management Systems
<input type="checkbox"/>	OMIS 106	Systems Analysis and Design
<input type="checkbox"/>	OMIS 150 (ACTG 155)	Financial Information Systems
<input type="checkbox"/>	One course from:	OMIS 107, 111, 113, 114, 120, 135, or 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

Business Analytics enables students to become adept at scientific, data-driven analysis of all aspects of business operations. Students learn how to use statistics, data management, data mining, and predictive and prescriptive modeling to turn data into information and insights to assist in making well-grounded business decisions. This minor is only open to business students.

MANAGEMENT INFORMATION SYSTEMS (MIS) MINOR

Management Information Systems enables non-MIS majors to enhance their understanding of the information technology that drives today's business. Students will learn how to create and manage information systems to support business functions. Being trained as business-oriented, technically proficient individuals, students can find careers in every type of industry from healthcare and banking to media and gaming, as well as in the high tech industry.