INFORMATION SYSTEMS AND ANALYTICS (MSISA)

The Master of Science in Information Systems and Analytics (MSISA) offers a unique blend of courses with a strong focus on data analytics–and it can be completed in one year.

This STEM-designated degree emphasizes important skills and tools in the information systems and analytics space such as SQL, Python, R, Tableau, database and data warehouse modeling, data mining, data visualization, and data storytelling.

The Quinlan School of Business also offers an MS in Business Data Analytics. Learn which of our analytics program best fits your needs through our analytics program comparison (https://www.luc.edu/quinlan/academics/graduatedegrees/ms/choosingabusinessdataanalyticsprogram/).

Related Programs

Master's

- Business Data Analytics (MSBDA) (https://catalog.luc.edu/graduate-professional/business/business-data-analytics-msbda/)

Curriculum

The 12-course curriculum of the Master of Science in Information Systems and Analytics prepares you to be a responsible leader in the fast-growing information systems and analytics fields.

Courses are offered in online, hybrid, and in-class formats. Students can complete all 12 courses in one year and completely online.

All MSISA students will be awarded the Business Data Analytics (BDA) Certificate (https://catalog.luc.edu/graduate-professional/business/business-data-analytics-certificate/) as well. The BDA certificate is a 5-course graduate Quinlan program, and all its courses are a part of the MSISA program.

Students with previous information systems coursework and part-time students should contact Nenad Jukić (njukic@luc.edu), the program director, for more information on how their courses would be sequenced.

Code	Title	Hours
Group One (Take all 7 Courses) [1]		
INFS 443	Business Analytics	
INFS 492	Database Systems	
INFS 494	Data Mining	
INFS 592	Data Visualization	
INFS 791	Programming for Business Decision Making	
INFS 796	Data Warehousing	
ISSCM 491	Managerial Statistics	
Group Two (Take up to 5 Courses)		
INFS 485	Business Requirement Analysis	
INFS 493	Strategic Use of Database Analytics	
INFS 691	Principles of Analytic Programming	
INFS 797	Applications of Visualization	
INFS 798	Quality in Product Management	
Group Three (Take 0 to 4 Courses) [2]		
ECON 625 / FINC 625	Applied Econometrics	
ISSCM 495	Forecasting Methods	
ISSCM 484N	Project Management	
ISSCM 596N	Data Driven Decision Making	
MARK 461	Research Methods in Marketing	
MARK 468	Digital Marketing	
MARK 562	Database Marketing Strategy	
MARK 661	Customer Analytics	
MARK 662	Marketing Metrics	
SCMG 489	Supply Chain Analytics	
Ethics Requirement (Take 1 Course)		
INFS 795	Ethics and Data Analytics	
MGMT 441N	Business Ethics	

1 Some courses may be substituted based on previous coursework with the permission of the program director.

2 Additional courses may be approved by the program director.

Suggested Sequence of Courses (online)

The below sequence of courses is meant to be used as a suggested path for completing coursework. An individual student's completion of requirements depends on course offerings in a given term as well as the start term for a major or graduate study. Students should consult their advisor for assistance with course selection.

Course	Title	Hours
Year 1		
Fall		
INFS 492	Database Systems	3
INFS 795	Ethics and Data Analytics	3
ISSCM 491	Managerial Statistics	3
	Hours	**9**
Winter		
INFS 443	Business Analytics	3
INFS 485	Business Requirement Analysis	3
INFS 796	Data Warehousing	3
	Hours	**9**
Spring		
INFS 494	Data Mining	3
INFS 592	Data Visualization	3
INFS 691	Principles of Analytic Programming	3
	Hours	**9**
Summer		
INFS 493	Strategic Use of Database Analytics	3
INFS 791	Programming for Business Decision Making	3
INFS 797	Applications of Visualization	3
	Hours	**9**
	Total Hours	**36**

Graduate & Professional Standards and Regulations

Students in graduate and professional programs can find their Academic Policies in Graduate and Professional Academic Standards and Regulations (https://catalog.luc.edu/graduate-professional-academic-standards-regulations/) under their school. Any additional University Policies supercede school policies.

Learning Outcomes

At the completion of the program, graduates are expected to:

- Use data to drive strategic and tactical business decisions;
- Utilize sophisticated database, data warehousing, data mining, and data visualization methodologies and techniques to capture and apply data as a corporate asset;
- Demonstrate competence with various languages and tools, SQL, R, Tableau, and Python;
- Lead, supervise, and manage information systems projects of varying levels of complexity;
- Demonstrate effective communication skills with technical and non-technical individuals and groups;
- Show ability to effectively collaborate with and provide technical leadership to a variety of business units and organizations;
- Demonstrate a high level of technical aptitude in design, development, and use of information systems components;
- Integrate values and ethics into data analysis and information systems projects and solutions.