

BUSINESS ANALYTICS (MBA/MS)

Loyola students may choose to combine an MBA (<https://catalog.luc.edu/graduate-professional/business/next-generation-mba/>) with a Master of Science in Business Analytics (<https://catalog.luc.edu/graduate-professional/business/business-analytics-ms/>) to provide the breadth and depth of knowledge often required of information systems and business data analytics professionals.

CURRICULUM

Students completing the dual degree will earn an MBA with a specialization in information systems and an MS degree.

Code	Title	Hours
Pre-Requisite Knowledge		
ISSCM 400N	Quantitative Methods I ¹	0
ISSCM 402N	Quantitative Methods II - Statistics Primer	0
MBA Introductory Courses ¹		
ACCT 400	Financial Accounting for Business Decisions	3
ECON 420	Managerial Economics ³	3
FINC 450	Financial Management ²	3
MARK 460	Marketing Management	3
SCMG 480	Intro to Operations Management	3
Required MBA Core Coursework		
FINC 470N	Business Finance	3
ISSCM 596N	Data Driven Decision Making	3
HRER 417N	Managing and Motivating in the Workplace	3
MARK 425N	Business Communication	1.5
MGMT 426N	Leadership Development	1.5
MARK 470N	Research, Insights and Storytelling	3
MGMT 431N	Business Consulting Course	3
Ethics Course		
Select one of the following:		3
ETHC 441N	Business Ethics	
INFS 795	Ethics and Data Analytics	
MGMT 446	International Business Ethics	
MS Business Analytics Requirements		
<i>Required Courses ⁴</i>		
INFS 443	Business Analytics	3
INFS 492	Database Systems	3
INFS 494	Data Mining	3
INFS 592	Data Visualization	3
INFS 791	Programming for Business Decision Making	3
INFS 796	Data Warehousing	3
ISSCM 491	Managerial Statistics	3
<i>Electives</i>		
<i>Group One (Take Up to 5 Courses)</i>		
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	
<i>Group Two (Take 0 to 4 Courses) ⁵</i>		
ECON 522	Game Theory & Strategy	
ECON 622 / FINC 622	Derivative Securities	
ECON 625 / FINC 625	Applied Econometrics	
FINC 452	Investment Management	
FINC 553	Applied Portfolio Management	
FINC 624	Interest Rate Risk Management	
FINC 626	Credit Risk Management and Structured Finance	
HRER 490	Analytical Problem Solving	
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 480	Intro to Operations Management	
SCMG 486	Global Logistics	
SCMG 487	Purchasing Management	
SCMG 488	Inventory Management	
SCMG 489	Supply Chain Analytics	
<i>Practicum</i>		3
Select one of the following:		
INFS 797	Applications of Visualization	
INFS 798	Quality in Product Management	
BSAD 699	Capstone Master of Business Data Analytics	
Total Hours		69

¹ May be waived.

² Co-requisite: ACCT 400 Financial Accounting for Business Decisions

³ Pre-requisite: ISSCM 400N Quantitative Methods I

⁴ Some courses may be substituted based on previous coursework with the permission of the program director.

⁵ Additional courses may be approved by the program director.

Dual Degree Programs

Students in dual degree programs are responsible for abiding by academic policies and graduation requirements of both academic units to which they are enrolled. It is strongly recommended that students schedule regular meetings with academic advisors from both units to ensure timely degree completion. Dual degree programs may have slightly different degree requirements from the standard for one or both of the degrees earned. Students should closely read through all degree requirements and ask for clarification as needed.

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/academic-standards-regulations/>)

graduate-professional/) under their school. Any additional University Policies supercede school policies.

LEARNING OUTCOMES

Learning Outcomes for the MBA

1. Integrative Business Knowledge: Graduates will be proficient in integrating the techniques, processes, and procedures of the fundamental business disciplines (accounting, economics, finance, marketing, management, human resource management, operations management, and information technology). They will be able to apply theory, skills, and knowledge from these disciplines to business practice.
2. Critical Decision Making: Graduates will demonstrate their capacity for critical analysis in processing, interpreting, and managing the quantitative and qualitative information necessary for effective managerial decision making.
3. Ethics and Responsible Leadership: Graduates will understand how to be a leader in business who exhibits personal integrity, ethical awareness, and an ability to apply ethical principles to business practice.
4. Global Perspective and Awareness of Diversity: Graduates will have a global perspective by recognizing international business issues and appreciating diversity, including culture, race, religion, and gender.
5. Communication: Graduates will be able to communicate effectively, orally. Graduates will be able to communicate effectively, in writing.

Learning Outcomes for the MS

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

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