

# BUSINESS/BUSINESS ANALYTICS (BBA/MS)

The five-year BBA/MS degree program provides focused and high-achieving undergraduate study. The program is designed for students intent upon building their resumes, skill sets, and business judgment. You'll have the chance to earn both undergraduate and graduate degrees in a compressed time frame.

## Related Programs

### Combined

- Business Analytics (MBA/MS) (<https://catalog.luc.edu/graduate-professional/dual-degree-programs/business-analytics-mba-ms/>)
- Business/Accountancy (BBA/MSA) (<https://catalog.luc.edu/undergraduate/accelerated-bachelors-masters-program/business-accountancy-bba-msa/>)
- Business/Finance (BBA/MSF) (<https://catalog.luc.edu/undergraduate/accelerated-bachelors-masters-program/business-finance-bba-msf/>)

## Curriculum

All Quinlan School of Business students must complete the University Core Curriculum, Business Core Curriculum, and Undergraduate School of Business program requirements.

Code	Title	Hours
<b>BBA Requirements</b>		
COMM 103	Business & Professional Speaking	3
MATH 110	Business Precalculus <sup>1</sup>	3-4
or MATH 130	Business Calculus	
ETHC 341	Ethics in Business	3
QUIN 101	Business Learning and Careers	0
QUIN 102	Financial Literacy and Well-Being	1
Two (2) Writing Intensive Courses <sup>2</sup>		6
Global Awareness Course <sup>3</sup>		3
Any business course from the International Business Major Group, or: (p. 2)		
ANTH 100	Globalization and Local Cultures	
ANTH 102	Culture, Society, and Diversity	
ENTR 313	Entrepreneurship - Global Opportunity Scan	
GLST 101	Introduction to Global Studies	
PLSC 102	International Relations in an Age of Globalization	
<b>Business Core Curriculum</b>		
ACCT 201	Introductory Accounting I	3
ACCT 202	Introductory Accounting II	3
INFS 343	Business Analytics	3
or ECON 346	Econometrics	
ECON 201	Principles of Microeconomics	3
ECON 202	Principles of Macroeconomics	3
FINC 301	Introductory Business Finance	3
or FINC 334	Principles of Corporate Finance	
ISSCM 241	Business Statistics	3
or STAT 103	Fundamentals of Statistics	

INFS 247	Business Information Systems	3
SCMG 332	Operations Management	3
LREB 315	Law and the Regulatory Environment of Business I	3
MGMT 201	Managing People and Organizations	3
MGMT 304	Strategic Management	3
MARK 201	Principles of Marketing	3

### MS Requirements

<b>Required Courses</b>		
INFS 443	Business Analytics	3
INFS 492	Database Systems	3
INFS 494	Applied Data Mining and Artificial Intelligence (AI)	3
INFS 592	Data Visualization	3
INFS 791	Programming for Business Decision Making	3
INFS 796	Data Warehousing	3
ISSCM 491	Managerial Statistics with Artificial Intelligence (AI)	3

### Electives 9

#### Group One (Take up to 5 Courses) <sup>4</sup>

INFS 485		
INFS 493	Database Analytics	
INFS 691	Principles of Analytic Programming	
INFS 797	Applications of Visualization	
INFS 798	AI Product Management	

#### Group Two (Take 0 to 4 Courses) <sup>5</sup>

ECON 522	Game Theory & Strategy	
ECON 622 /	Derivative Securities	
FINC 622		
ECON 625 /	Applied Econometrics	
FINC 625		
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 484N	Project Management	
ISSCM 495	Forecasting Methods with Artificial Intelligence (AI)	
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	

### Ethics Requirement 3

Select one of the following:

ETHC 441N	Business Ethics	
INFS 795	Ethics and Data Analytics	
MGMT 446	International Business Ethics	

**Practicum**

Select one of the following:

INFS 797	Applications of Visualization
INFS 798	AI Product Management
BSAD 699	

**Total Hours** **91-92**

- <sup>1</sup> Students majoring in Economics or Finance should take MATH 130 Business Calculus (or MATH 131 Applied Calculus I or MATH 161 Calculus I). All other students take MATH 110 Business Precalculus (or MATH 131 Applied Calculus I).
- <sup>2</sup> One of which must be a Quinlan course or ENGL 210 Business Writing
- <sup>3</sup> A study abroad experience will also satisfy this requirement.
- <sup>4</sup> Some courses may be substituted based on previous coursework with the permission of the program director.
- <sup>5</sup> Additional courses may be approved by the program director.

**International Business Major Group**

Code	Title	Hours
ACCT 306	Advanced Financial Accounting	3
ECON 323	International Economics	3
ECON 324	International Monetary Relations	3
ECON 325	Economics of Growth & Development	3
FINC 355	International Finance Management	3
HRER 329	Global HR and Organizational Behavior	3
IBUS 201	Introduction to International Business	3
IBUS 201H	Business Management: A Global and Social Perspective	3
IBUS 315	International Management	3
INFS 336	Global Perspectives on Digital Business	3
MARK 363	International Marketing	3
SCMG 338	Global Transportation	3
SPRT 345	Globalization of Sport Industry	3

**Additional Undergraduate Graduation Requirements**

All Undergraduate students are required to complete the University Core, at least one Engaged Learning course, and UNIV 101. SPCS students are not required to take UNIV 101. Nursing students in the Accelerated BSN program are not required to take core or UNIV 101. You can find more information in the University Requirements (<https://catalog.luc.edu/undergraduate/university-requirements/>) area.

**Guidelines for Accelerated Bachelor's/Master's Programs****Terms**

- **Accelerated Bachelor's/Master's programs:** In this type of program, students share limited credits between their undergraduate and graduate degrees to facilitate completion of both degrees.
- **Shared credits:** Graduate level credit hours taken during the undergraduate program and then applied towards graduate program requirements will be referred to as shared credits.

**Admission Requirements**

Accelerated Bachelor's/Master's programs are designed to enhance opportunities for advanced training for Loyola's undergraduates. Admission to these programs must be competitive and will depend upon a positive review of credentials by the program's admissions committee. Accordingly, the admission requirements for these programs may be higher than those required if the master's degree were pursued entirely after the receipt of a bachelor's degree. That is, programs may choose to have more stringent admissions requirements in addition to those minimal requirements below.

**Requirements:**

- Declared appropriate undergraduate major,
- By the time students begin taking graduate courses as an undergraduate, the student has completed approximately 90 credit hours, or the credit hours required in a program that is accredited by a specialty organization,<sup>1</sup>
- A minimum cumulative GPA for coursework at Loyola that is at or above the program-specific requirements, a minimum major GPA that is at or above the program-specific requirements, and/or appropriate designated coursework for evaluation of student readiness in their discipline.<sup>2</sup>

Students not eligible for the Accelerated Bachelor's/Master's program (e.g., students who have not declared the appropriate undergraduate major) may apply to the master's program through the regular admissions process. Students enrolled in an Accelerated Bachelor's/Master's program who choose not to continue to the master's degree program upon completion of the bachelor's degree will face no consequences.<sup>3</sup>

Ideally, a student will apply for admission (or confirm interest in proceeding towards the graduate degree in opt-out programs) as they approach 90 credit hours. Programs are encouraged to begin advising students early in their major so that they are aware of the program and, if interested, can complete their bachelor's degree requirements in a way that facilitates completion of the program. Once admitted as an undergraduate, Program Directors should ensure that students are enrolled using the plan code associated with the Accelerated Bachelor's/Master's program. Using the plan code associated with the Accelerated Bachelor's/Master's program will ensure that students may be easily identified as they move through the program. Students will not officially matriculate into the master's degree program and be labeled as a graduate student by the university, with accompanying changes to tuition and Financial Aid (see below), until the undergraduate degree has been awarded. Once admitted to the graduate program, students must meet the academic standing requirements of their graduate program as they complete the program curriculum.

- <sup>1</sup> Programs that have specialized accreditation will adhere to the admissions criteria provided by, or approved by, their specialized accreditors.
- <sup>2</sup> The program will identify appropriate indicators of student readiness for graduate coursework (e.g., high-level performance in 300 level courses). Recognizing differences between how majors are designed, we do not specify a blanket requirement.
- <sup>3</sup> If students choose not to enroll in the Accelerated Bachelor's/Master's program, they still must complete all of the standard requirements associated with the undergraduate degree (e.g., a capstone).

For more information on Admissions requirements, visit here (<https://gpem.luc.edu/portal/admission/?tab=home>).

## Curriculum

*Level and progression of courses.* The Accelerated Bachelor's/Master's programs are designed to be competitive and attractive to our most capable students. Students admitted to Accelerated Bachelor's/Master's programs should be capable of meeting graduate level learning outcomes. Following guidance from the Higher Learning Commission, only courses taken at the 400 level or higher (including 300/400 level courses taken at the 400 level) will count toward the graduate program.<sup>1,2</sup>

Up to 50% of the total graduate level credit hours, required in the graduate program, may come from 300/400 level courses where the student is enrolled in the 400 level of the course. Further, at least 50% of the credit hours for the graduate program must come from courses that are designed for and restricted to graduate students who have been admitted to a graduate program at Loyola (e.g., enrolled in plan code that indicates the Accelerated Bachelor's/Master's program, typically ending with the letter "D").<sup>3</sup>

In general, graduate level coursework should not be taken prior to admission into the Accelerated Bachelor's/Master's program. Exceptions may be granted for professional programs where curriculum for the Accelerated Bachelor's/Master's program is designed to begin earlier. On the recommendation of the program's Graduate Director, students may take one of their graduate level courses before they are admitted to the Accelerated Bachelors/Master's program if they have advanced abilities in their discipline and course offerings warrant such an exception.<sup>4</sup> Undergraduate degree requirements outside of the major are in no way impacted by admission to an Accelerated Bachelor's/Master's program.<sup>5</sup>

*Shared credits.* Undergraduate courses (i.e., courses offered at the 300 level or below) cannot be counted as shared credits nor count towards the master's degree. Up to 50% of the total graduate level credit hours, required in the graduate program, may be counted in meeting both the undergraduate and graduate degree requirements. Of those shared credits, students in an Accelerated Bachelor's/Master's program should begin their graduate program with the standard introductory course(s) for the program whenever possible. So that students may progress through the Accelerated Bachelor's/Master's program in a timely manner, undergraduate programs are encouraged to design their curriculum such that a student can complete some required graduate credit hours while completing the undergraduate degree. For instance, some of the graduate curriculum should also satisfy electives for the undergraduate major.

The program's Graduate Director will designate credit hours to be shared through the advising form and master's degree conferral review process. Shared credit hours will not be marked on the undergraduate record as having a special status in the undergraduate program. They will be included in the student's undergraduate earned hours and GPA. Graduate credit hours taken during the undergraduate program will not be included in the graduate GPA calculation.

graduate class will not diminish in any way the experience of the graduate students regularly enrolled.

<sup>4</sup> For example, if a particular course is only offered once every 2-3 years, and a student has demonstrated the necessary ability to be successful, the Graduate Director may allow a student to take a graduate level course to be shared prior to the student being formally admitted to the graduate program. See, also, footnote 3.

<sup>5</sup> Students should not, for example, attempt to negotiate themselves out of a writing intensive requirement on the basis of admission to a graduate program.

## Graduation

Degrees are awarded sequentially. All details of undergraduate commencement are handled in the ordinary way as for all students in the School/College/Institute. Once in the graduate program, students abide by the graduation deadlines set forth by the graduate program. Students in these programs must be continuously enrolled from undergraduate to graduate degree program unless given explicit permission by their program for a gap year or approved leave of absence. In offering the option of an Accelerated Bachelor's/Master's program, the university is making possible the acceleration of a student's graduate degree completion. It should be understood that students may not request deferral of their matriculation into the Master's degree program. If students would like to delay their graduate studies after earning the undergraduate degree, they may apply for admission to the traditional master's degree program. Any application of graduate credit earned while in the undergraduate program is subject to the policies of the graduate degree granting school.

## Learning Outcomes

### Learning Outcomes for the MS

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.

<sup>1</sup> If students wish to transfer credits from another university to Loyola University Chicago, the program's Graduate director will review the relevant syllabus(es) to determine whether it meets the criteria for a 400 level course or higher.

<sup>2</sup> Programs with specialized accreditation requirements that allow programs to offer graduate curriculum to undergraduate students will conform to those specialized accreditation requirements.

<sup>3</sup> In rare cases, the Graduate Director may authorize enrollment in a 400-level course for a highly qualified and highly motivated undergraduate, ensuring that the undergraduate's exceptional participation in the