

# INFORMATION SYSTEMS AND ANALYTICS (BBA)

The ability to combine systems knowledge with an understanding of the "big picture" means job-ready value. Our BBA in Information Systems and Analytics degree program at the Quinlan School of Business prepares students for a professional career in the rapidly changing fields of information systems and data analysis.

## Related Programs

### Minor

- Information Systems Minor (<https://catalog.luc.edu/undergraduate/business/information-systems-minor/>)

## Curriculum

All Quinlan School of Business students must complete the University Core Curriculum (<https://catalog.luc.edu/undergraduate/university-requirements/university-core/>), Business Core Curriculum, and Undergraduate School of Business program requirements. Students pursuing the BBA degree in Information Systems and Analytics must also complete 15 required hours from the Major Requirements listed below.

Code	Title	Hours
<b>Undergraduate Business Program Requirements</b>		
COMM 103	Business & Professional Speaking	3
MATH 110	Business Precalculus	3
or MATH 118	Precalculus II	
ETHC 341	Ethics in Business	3
QUIN 101	Business Learning and Careers	0
QUIN 102	Financial Literacy and Well-Being	1
QUIN 202	Career Preparation	2
<i>Writing Intensive</i>		
Select two Writing Intensive courses <sup>1</sup>		6
<i>Global Awareness</i>		
Select one of the following: <sup>2</sup>		3
Any business course from the International Business Major Group, or: (p. 1)		
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
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	
INFS 247	Business Information Systems	3
INFS 343	Business Analytics	3
or ECON 346	Econometrics	
ISSCM 241	Business Statistics	3

or STAT 103	Fundamentals of Statistics	
LREB 315	Law and the Regulatory Environment of Business I	3
MARK 201	Principles of Marketing	3
MGMT 201	Managing People and Organizations	3
MGMT 304	Strategic Management	3
SCMG 232	Introduction to Supply Chain Management	3
<b>Major Requirements</b>		
INFS 346	Database & Data Warehousing Systems	3
INFS 347	Systems Analysis & Design	3
INFS 360	Data Visualization & Business Intelligence	3
Select one of the following:		3
INFS 394	Programming in Python	
INFS 397	VBA Programming with MS Office	
Select two of the following. The Programming course not taken above (INFS 394 or 397) may be taken as an elective in this major:		6
INFS 336	Global Perspectives on Digital Business	
INFS 347	Systems Analysis & Design	
INFS 348	Advanced Data Analytics and AI	
INFS 362	User Experience (UX) and Biometrics	
INFS 394	Programming in Python	
INFS 395	Independent Study in Information Systems	
INFS 397	VBA Programming with MS Office	
INFS 399	Special Topics in Information Systems <sup>3</sup>	
ISSCM 349	Project Management	
<b>Total Hours</b>		<b>78</b>

<sup>1</sup> One must be a Quinlan course or ENGL 210 Business Writing. Writing Intensive courses must be taken in separate terms.

<sup>2</sup> A study abroad experience will also satisfy this requirement.

<sup>3</sup> Only one INFS 399 Special Topics in Information Systems class is allowed to count for this major.

## 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

## Suggested Sequence of Courses

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
<b>Year 1</b>		
<b>Fall</b>		
ECON 201	Principles of Microeconomics	3
INFS 247	Business Information Systems	3
MATH 110 or MATH 118	Business Precalculus or Precalculus II	3
QUIN 101	Business Learning and Careers	0
<b>Hours</b>		<b>9</b>
<b>Spring</b>		
ACCT 201	Introductory Accounting I	3
ECON 202	Principles of Macroeconomics	3
QUIN 102	Financial Literacy and Well-Being	1
<b>Hours</b>		<b>7</b>
<b>Year 2</b>		
<b>Fall</b>		
ACCT 202	Introductory Accounting II	3
INFS 346	Database & Data Warehousing Systems	3
ISSCM 241 or STAT 103	Business Statistics or Fundamentals of Statistics	3
QUIN 202	Career Preparation	2
<b>Hours</b>		<b>11</b>
<b>Spring</b>		
MGMT 201	Managing People and Organizations	3
SCMG 232	Introduction to Supply Chain Management	3
Business Writing Intensive Course		3
INFS Analysis Choice		3
<b>Hours</b>		<b>12</b>
<b>Year 3</b>		
<b>Fall</b>		
MARK 201	Principles of Marketing	3
COMM 103	Business & Professional Speaking	3
INFS Programming Choice		3
<b>Hours</b>		<b>9</b>
<b>Spring</b>		
FINC 301	Introductory Business Finance	3
INFS 343 or ECON 346	Business Analytics or Econometrics	3
ETHC 341	Ethics in Business	3
<b>Hours</b>		<b>9</b>
<b>Year 4</b>		
<b>Fall</b>		
LREB 315	Law and the Regulatory Environment of Business I	3
Writing Intensive Course		3
INFS Elective		3
<b>Hours</b>		<b>9</b>
<b>Spring</b>		
MGMT 304	Strategic Management	3
Global Awareness		3

INFS Elective	3
<b>Hours</b>	<b>9</b>
<b>Total Hours</b>	<b>75</b>

## Specialized Requirements

### Transfer Students

At the discretion of the Quinlan School of Business, a maximum of one transfer course (<https://www.luc.edu/quinlan/academics/studentresources/undergraduate/transfercrredit/>) taken prior to matriculating at Loyola University Chicago may be allowed to satisfy major requirements.

### Study Abroad

Students planning to study abroad are encouraged to meet with their academic advisor early in the planning stage. A student will be permitted to take up to two approved courses in any Quinlan major or minor (and including BA Economics majors). All study abroad courses must be reviewed through the Study Abroad Office course approval process.

## Important Details

A 2.0 average GPA is required for all attempted business courses. (BA in Economics students must also earn a 2.0 average GPA for all attempted Economics courses).

Quinlan students are limited to double dipping once (that is, counting one course twice) between any major or minor combination, regardless of what program the major or minor is taken in. Non-Quinlan students are limited to double dipping twice (that is, counting two courses twice) between business school minors and/or their respective majors.

## Additional Undergraduate Graduation Requirements

All Undergraduate students are required to complete the University Core, at least one Engaged Learning course, and UNIV 101. SCPS 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.

## Learning Outcomes

- Integrating values and ethics into data analysis and information systems projects and solutions
- Conduct data analysis and information systems focused projects
- Demonstrate competence with SQL and at least one programming language
- Requirements analysis and specification
- Systems analysis and design
- Conceptual and logical data modeling
- Implementation and testing of back and front ends

The Loyola student network provides the student with access to current systems development environments such as Oracle, Teradata, OLAP/BI Tools, Data Visualization Tools, VBA, and C#.