INFORMATION SYSTEMS AND BUSINESS ANALYTICS (ISBA), BACHELOR OF BUSINESS ADMINISTRATION (B.B.A.) DEGREE

Objectives

The Bachelor of Business Administration (B.B.A.) degree in Information Systems and Business Analytics (ISBA) is designed to prepare students for careers in the Information Systems and Business Analytics fields and provide students opportunities to develop analytics skills and learn how to apply latest information technology tools to solve business problems at the operational, technical, and strategic levels. Students will acquire foundational programming skills, learn to use various development tools, and acquire critical data management skills and competencies. They will understand how organizational processes interact with IS/IT and learn how to design systems and analytic tools to support these processes. The major will provide students critical skills necessary to foster innovation as well as continuously adapt to the ever-changing field of IT and business applications.

Learning Outcomes

Learning outcomes for ISBA majors are as follows:

1. Utilize competencies gained from hands-on experience in core information technologies that include programming languages, database management systems, web development tools, spreadsheets, and other data analysis and visualization tools.
2. Identify, structure, and solve business problems by proposing an IS, IT and/or data analytics solution
3. Plan, manage, develop, and describe how to implement IT and/or data analytics-based IS solutions in business and organizational settings
4. Apply critical thinking and problem-solving skills when analyzing business problems
5. Effectively communicate complex technological and/or analytical concepts through oral, visual, and written communication

Core, Major, and Elective Information Systems and Business Analytics Courses

Code	Title	Semester Hours
Lower Division Business Core Requirements		
BCOR 1910	Business for Good	2
BCOR 2110	Financial Accounting	4
BCOR 2120	Accounting Information for Decision Making	4
BCOR 2210	Legal Environment of Business	2
BCOR 2710	Business Information Technology	4
ECON 1050	Introductory Economics	4
ECON 2300	Introductory Statistics	4
MATH 112	Calculus for Business	3
Subtotal		27

Code	Title	Semester Hours
Upper Division Business Core Requirements		
BCOR 3410	Fundamentals of Finance	4
BCOR 3510	Marketing and Business Communications	4
BCOR 3610	Managing People and Organizations	4
BCOR 4910	Business Ethics and Sustainability	4
One course from the "Quantitative Methods for Business" course-list [1]		4
One course from the "International/Global Awareness" course-list [2]		4
One course from the "Strategic Business Integrations" course-list [3]		4
Subtotal		28
Total Semester Hours		**55**

[1]

e.g., BCOR 3750 Analytics in Operations and Supply Chain Management

[2]

e.g., BCOR 3860 International Business

[3]

e.g., BCOR 4970 Strategic Management

Note:

All majors in ISBA must complete BCOR 2710 Business Information Technology before they can start taking the upper division ISBA courses. Students with a B.B.A. in ISBA are required to complete five 4-semester-hour courses (for a total of 20 semester hours) in the ISBA area, including two required classes: ISBA 3710 Database Management Systems and ISBA 4797 Capstone Project. Students also need to complete either ISBA 4796, a 1-unit Capstone Proposal Development course or ISBA 3720, a 4-unit course on Systems Analysis and Design a semester prior to their Capstone Project. Students must also fulfill a programming requirement by completing either ISBA 3730 Programming for Business Applications or CMSI 1010 Computer Programming and Laboratory. If students take ISBA 3730 Programming for Business Applications, then they only need to take two additional 4-semester-hour ISBA electives. If they take, CMSI 1010 Computer Programming and Laboratory to fulfill the programming requirement, then they need to take three additional 4-semester-hour ISBA electives.

ISBA Major Course Requirements

Majors must complete at least 20 units of upper-division ISBA courses as described below.

Code	Title	Semester Hours
ISBA 3710	Database Management Systems	4
Select one of the following:		4
ISBA 3730	Programming for Business Applications	
CMSI 1010	Computer Programming and Laboratory (please see note)	
ISBA 3720	Systems Analysis and Design	
ISBA 4796	Capstone Proposal Development	
ISBA 4797	Capstone Project	4
Total Semester Hours		**12**

Note:

Additionally, students need to choose two 4-semester-hour courses if they took ISBA 3730 Programming for Business Applications (or three 4-

semester-hour ISBA courses if programming requirement is satisfied by CMSI 1010 Computer Programming and Laboratory) from the following list of ISBA electives:

Code	Title	Semester Hours
ISBA 3720	Systems Analysis and Design	4
ISBA 4715	Developing Business Applications Using SQL	4
ISBA 4740	Financial Modeling and Analytics	4
ISBA 4750	Business Web and App Development	4
ISBA 4755	Introduction to Big Data	4
ISBA 4760	Data Visualization and GIS	4
ISBA 4770	Cybersecurity	4
ISBA 4775	Network Cloud Computing	4
ISBA 4790	Machine Learning	4
ISBA 4796	Capstone Proposal Development	1
ISBA 4798	Special Studies	1-4
ISBA 4799	Independent Studies	1-4

Note:

All upper division ISBA courses must be taken in resident at LMU. A cumulative GPA of C (2.0) must be achieved in the core requirements (all business, economics, and math courses).

For purpose of meeting the requirements for the Information Systems and Business Analytics (ISBA) major curriculum, a minimum grade of a C (2.0) must be earned in all courses required in the major. Additionally, a minimum grade of C (2.0) must also be earned in BCOR 2710, BCOR 3750, ISBA 3710, ISBA 4797 and either in ISBA 3730 or CMSI 1010. If a student is unable to attain a grade of C (2.0) in each of BCOR 2710, BCOR 3750, and ISBA 3710 after two attempts, that student will not be allowed to continue in the ISBA major.

ISBA 3730 Programming for Business Applications, if taken after taking CMSI 1010 Computer Programming and Laboratory, will be considered as one of the three required ISBA electives.

Model 4-Year Plan–Bachelor of Business Administration–Information Systems and Business Analytics Major Curriculum

The following curriculum represents the order or sequence in which it is expected that students will take the various courses required for the B.B.A. (Information Systems and Business Analytics major) degree.

ISBA (B.B.A) Sample Schedule

Course	Title	Semester Hours
First Year		
Fall		
BCOR 1910	Business for Good	2
ECON 1050	Introductory Economics	4
FFYS 1000	First Year Seminar	4
MATH 112	Calculus for Business	3
University Core		4
	Semester Hours	**17**
Spring		
ECON 2300	Introductory Statistics	4
RHET 1000	Rhetorical Arts	3-4
University Core		3-4
University Core		4
	Semester Hours	**14-16**
Sophomore Year		
Fall		
BCOR 2110	Financial Accounting	4
BCOR 2210	Legal Environment of Business	2
University Core		3-4
University Core		4
Elective		3-4
	Semester Hours	**16-18**
Spring		
BCOR 2120	Accounting Information for Decision Making	4
BCOR 2710	Business Information Technology	4
BCOR 3410	Fundamentals of Finance	4
Elective		3-4
	Semester Hours	**15-16**
Junior Year		
Fall		
BCOR 3510	Marketing and Business Communications	4
BCOR 3610	Managing People and Organizations	4
ISBA 3710	Database Management Systems	4
ISBA 3730 or CMSI 1010	Programming for Business Applications or Computer Programming and Laboratory	4
	Semester Hours	**16**
Spring		
BCOR 3750	Analytics in Operations and Supply Chain Management	4
BCOR 3860	International Business	4
ISBA Elective		4
Elective		3-4
	Semester Hours	**15-16**
Senior Year		
Fall		
BCOR 4910	Business Ethics and Sustainability	4
ISBA 4796 or ISBA 3720	Capstone Proposal Development or Systems Analysis and Design	1-4
ISBA Elective [1]		4
University Core		4
Elective		3-4
	Semester Hours	**16-20**
Spring		
BCOR 4970	Strategic Management	4
ISBA 4797	Capstone Project	4
University Core		4
Select one of the following:		3-4
Elective		
ISBA elective [2]		
	Semester Hours	**15-16**
	Minimum Semester Hours	**124-135**

[1]

if not taking ISBA 3720 Systems Analysis and Design

[2]

if took CMSI 1010 Computer Programming and Laboratory

Note:

Electives and some University Core courses may vary in terms of the number of credits granted. The total number of semester hours required is 128 for graduation, which assume that each course will be 4 semester hours. If less, compensatory credits may be required to reach 128.