

Saint Joseph's University

BS in Business Administration - Business Intelligence & Analytics/Artificial Intelligence for Business Double Major Curriculum Requirements

Name	ID #
General Education Program (GEP)	
Signature Courses	
1.	First Year Seminar (XXX 150)
2.	PHL 154 Moral Foundations
3.	Theology Signature Core (THE 153, THE 154, or THE 155 will fulfill the req.)
4.	ENG 102 Texts and Contexts
5.	HIS 154 Forging the Modern World
6.	Faith and Reason Course (pre-reqs: THE 154 and PHL 154)*
	INT 151 Inequality in American Society. (Required for students entering Fall 2023 and later)
Variable Courses (The number of variable courses vary depending on language placement and natural science)	
7.	Art, Music/Theater/Film, or Literature
8.	Math Beauty (MAT 155, 161 or 130-139). *See Note on page 3
9.	Natural Science GEP (1 Lab course OR 2 Non-Lab courses)
10.	Non-native Language
11.	Non-native Language
12.	ECN 101 Microeconomics
13.	PHL Anthropology (Pre-req: PHL 154)
14.	Religious Difference (THE/REL)
15.	English 101: Craft of Language
Integrative Learning Courses (3 courses)	
16.	MAT 123 Differential Calc or higher calculus *See Note on page 3
17.	ECN 102 Macroeconomics
18.	Non Department Course (see catalog for options)
Overlays (All students must complete the W-I, E-I, and DGNW overlay. The Class of 2025 forward must also complete the additional Diversity overlay.)	
	Writing-Intensive (Pre-req: ENG 101)
	Ethics-Intensive (pre-req: PHL 154)
	Diversity/Global/Non-Western
	Diversity (Class of 2025 forward only)
Business Core Requirements (10 courses + DSS100)	
	DSS 100 Excel Competency (1-Credit)
19.	ACC 101 Financial Accounting
20.	ACC 102 Managerial Accounting
21.	DSS 200 Artificial Intelligence in Business
22.	DSS 210 Business Statistics
23.	DSS 220 Business Analytics
24.	FIN 200 Introduction to Finance
25.	MGT 360 Legal Environment of Business I
26.	MGT 110/120 Essentials of Organ Behavior or Essentials of Management
27.	MKT 201 Principles of Marketing
28.	BUS 495 Business Strategy
Courses required Double Major	
29.	DSS 315 BIA Concepts & Practices
30.	DSS 330 Database Management Systems
31.	DSS 420 Introduction to Data Mining
32.	DSS 435 Advanced Business Analytics
33.	DSS 325 Open Source Program Lang
34.	DSS 415/416 Data Wrangling & Visualization
35.	DSS 451 AI and ML Business Application
36.	DSS 455 ML Methods in Business
37.	BIA Elective (see catalog for options)
38.	ML/AI Elective (see catalog for options)
Electives	
39.	Free Elective
40.	Free Elective

Department Contact Information

Department Chair

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Typical Course Sequence

	Fall	Spring
FRESHMAN YEAR	DSS 100 Excel Competency (1 cr.) ¹	INT 151 Inequality in American Society (1 cr.)
	ACC 101 Financial Accounting	ACC 102 Managerial Accounting
	ECN 101 Microeconomics	ENG 101 Craft of Language (or AP credit)
	First Year Seminar	MGT 110 or 120 or First Year Seminar
	Math Beauty	ILC-Mathematics Course
	Foreign Language	Foreign Language
SOPHOMORE YEAR		
	DSS 200 Artificial Intelligence in Business	DSS 220 Business Analytics
	DSS 210 Business Statistics	ECN 102 Macroeconomics
	ENG 102 Texts & Contexts	MKT 201 Principles of Marketing
	FIN 200 Introduction to Finance	Theology Signature Core (THE 153, 154, or 155)
	PHL 154 Moral Foundations	ELECTIVE
JUNIOR YEAR		
	DSS 315 BIA Concepts & Practices	DSS 330 Database Management Systems
	DSS 435 Advanced Business Analytics	DSS 420 Intro to Data Mining
	HIS 154 Forging the Modern World	DSS 325 Open Source Programming
	Laboratory Science	MGT 360 Legal Environment of Business
	Philosophical Anthropology	Religious Difference
SENIOR YEAR		
	DSS 451 AL and ML Business Application	DSS 455 ML Methods in Business
	DSS 415/416 Data Wrangling and Visualization	DSS BIA Elective
	DSS ML/AI Elective	BUS 495 Business Strategy (either semester)

	Fine Arts/Literature	Faith and Reason
	Non Department Course (ILC 3)	ELECTIVE

- DSS 100 Excel Competency is a one credit online course that must be completed by the end of freshman year. The course is offered in fall and spring semesters and is a pre-requisite for ACC 102 and DSS 200.
- BIA majors must take at least one course in Calculus (MAT 123, MAT 155, or MAT 161). MAT 123 is required for students who did not take MAT 155, MAT 161, or earn credit for AP Calculus. MAT 123 only fulfills the ILC requirement, not the Math Beauty requirement.
- Integrative Learning Courses: 1) MAT 123 Differential Calculus or high level calculus course, 2) ECN 102 Macroeconomics, and 3) Non Department course. Students who completed a calculus course for their math beauty (i.e., MAT 155, MAT 161, or higher) will take an additional Non Department course as an alternative to MAT 123. Students who complete MAT 129 or MAT 132 as their Math Beauty may not count them as their Non Department course. They must select an additional Non Department course. Please see the [BIA section of the online catalog](#) for more courses that meet the ILC requirement.
- DSS 210 is a prerequisite for DSS 220 and should be taken first, DSS 200 is not a prerequisite and can be taken either semester.
- To satisfy the natural science requirement the student may take either one-credit laboratory course or two 3-credit non-laboratory courses. If choosing the 2 semester option, the second course replaces an elective.
- **Overlays:** In selecting courses, all students are required to identify courses that meet the overlay requirements in the areas of 1) Diversity, Globalization or Non-Western Area Studies, 2) Ethics Intensive and 3) Writing Intensive. Students in the Class of 2025 forward must also complete an additional Diversity overlay (4th overlay). Many of the courses already in your schedule may cover these overlays.