

Enterprise AI

(120 credit minimum)

First Year

1st Semester		Credits
FYS SEM	First-Year Student Seminar	0
DS 100	Basic Foundations of Data Science	3
ENGL 101	English Composition: Introduction to Academic Writing	3
IS 117	Introduction to Website Development	3
MATH 138	General Calculus I *	3
Science Literacy GER (https://catalog.njit.edu/undergraduate/academic-policies-procedures/general-education-requirements/natural-science-ger/)		3
Term Credits		15

2nd Semester

ENGL 102	English Composition: Introduction to Writing for Research	3
DS 110	Basic Foundations of Artificial Intelligence	3
IS 265	Introduction to Information Systems	3
Science Literacy with Lab GER (https://catalog.njit.edu/undergraduate/academic-policies-procedures/general-education-requirements/natural-science-ger/)		4
MATH 105	Elementary Probability and Statistics	3
Term Credits		16

Second Year

1st Semester

General Elective 1		3
IS 218	Building Web Applications	3
MGMT 216	Business Data Analytics	3
IS 350	Computers, Society and Ethics	3
IS 247	Designing the User Experience	3
Term Credits		15

2nd Semester

YWCC 207	Computing & Effective Com	1
History and Humanities GER 200 level (https://catalog.njit.edu/undergraduate/academic-policies-procedures/general-education-requirements/ger-200-level/)		3
General Elective 2		3
CS 118	Introduction to Computer Science II in Python	3
IS 331	Database Design Management and Applications	3
IS 390	Requirements Analysis and Systems Design	3
Term Credits		16

Third Year

1st Semester

COM 312 or COM 313	Effective Communication or Writing in the Workplace	3
History and Humanities GER 300+ level (https://catalog.njit.edu/undergraduate/academic-policies-procedures/general-education-requirements/ger-300-level/)		3
IS 392	AI-Driven Text Analytics	3
IS 465	Data Analytics for Business Information Systems	3
IS 375	Discovering User Needs for UX	3
Term Credits		15

2nd Semester

YWCC 307	Professional Dev in Computing	1
General Elective 3 ²		3

IS 480	Data-Centric AI	3
General Elective 4 ²		3
IS 448	Usability & Measuring UX	3
IS 455	IS Mgmt & Business Processes	3
Term Credits		16
Fourth Year		
1st Semester		
General Elective 5 ²		3
IE 492 or ENTR 210	Engineering Management or Introduction to Entrepreneurship	3
IT 310	E-Commerce Technology	3
MGMT 480	Managing Technology and Innovation	3
Humanities and Social Science Senior Seminar GER (https://catalog.njit.edu/undergraduate/academic-policies-procedures/general-education-requirements/hss-capstone/)		3
Term Credits		15
2nd Semester		
General Elective 6 ²		3
General Elective 7 ²		3
Select one of the following:		3
IS 491 or IT 491	Senior Project - IS or IT Capstone Project	
IS 425	Enterprise AI Applications & Infrastructure	3
Term Credits		12
Total Credits		120

¹ **Math:** We highly recommend MATH 333 Probability and Statistics to replace MATH 105 Elementary Probability and Statistics, particularly for students contemplating advanced or graduate work in computing. We also encourage you to take one or more advanced statistics courses as free electives, such as MATH 341 Statistical Methods II or MATH 344 Regression Analysis both of which require MATH 333 Probability and Statistics as a prerequisite.

² Independent Study (optionally leading to the Undergraduate Thesis Option): We encourage you to consider an independent study (IS 488) as part of your electives as juniors and seniors. You could then continue with an Undergraduate Thesis (IS 489), which optionally can substitute for IS 491 or IT 491. The thesis option is explained further on the Informatics Department web site. Please consult your advisor as early in your studies as possible to plan appropriately for all of these opportunities.

* Student can take MATH 111 (Calculus I) instead of MATH 138 (General Calculus I)