

#2501
COMPUTER SCIENCE
Data Science Option

FALL 2025

COURSE	CODE	CR	GR	TR
General Education Foundation (35 CR)				
COMMUNICATION (6 CR)				
English Composition I	ENG 111	3		
English Composition II	ENG 112	3		
MATH/SCIENCE/TECHNOLOGY (12 CR)				
Precalculus**	MAT 123	4		
Analytic Geometry & Calculus I**	MAT 131	4		
Probability & Statistics+	MAT 130	4		
SOCIAL SCIENCE (3 CR)				
Choose from General Education list (Social Science)		3		
HUMANITIES (3 CR)				
Choose from General Education course list (Humanities)		3		
HUMANITIES/SOCIAL SCIENCE (3 CR)				
Choose from General Education course list (Humanities/Social Science)		3		
GENERAL EDUCATION (8 CR) *				
Laboratory Science Sequence		4		
Laboratory Science Sequence		4		
COMPUTER SCIENCE CORE (25 CR)				
Intro to Data Science+	MAT 114	3		
Computer Science I	CMP 128	3		
Computer Science II (Java)	CMP 129	3		
Fundamentals of Programming (python)+	CMP 131	3		
Data Structures and Algorithms (CS III)	CMP 233	3		
Database Programming+	CMP 241	3		
Discrete Mathematics	MAT 225	4		
Data Science Programming+	CMP 262	3		
TOTAL		60		

NOTES:

This is an unofficial document and should be used for academic planning purposes only. All students are required to see their Academic Advisor each semester to discuss and approve their selection of courses before they register.

Due to continual program revisions mandated by accrediting agencies and/or changes in state mandated requirements, students should consult their academic advisor when selecting courses.

If you need the name of your academic advisor, contact
Department of Information Technologies in Emeriti Hall, 225 at (973) 328-5780.

To determine the transferability of your courses to participating NJ Colleges & Universities, access www.njtransfer.org.

*See back page for more information.

****Students who meet or exceed required Math thresholds should consult with an advisor regarding Math course placement.**

+Completion of these five courses will earn students a Certificate in Data Analytics. See your Academic Advisor to ensure you have declared this additional credential on your academic record.

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Suggested Sequence by Semester

*This suggested sequence does not include any required developmental courses.
Degree completion time may vary depending upon the number of credits taken each semester.*

SEMESTER I			CREDITS	SEMESTER II			CREDITS
Fundamentals of Programming	CMP 131	3		Database Programming (SQL)	CMP 241	3	
Probability & Statistics	MAT 130	4		Computer Science I	CMP 128	3	
English Composition I	ENG 111	3		English Composition II	ENG 112	3	
Humanities Elective		3		Precalculus	MAT 123	4	
Intro to Data Science	MAT 114	<u>3</u>		Social Science Elective		<u>3</u>	
	TOTAL	16			TOTAL	16	
SEMESTER III				SEMESTER IV			
Computer Science II (Java)	CMP 129	3		Data Structures & Algorithms	CMP 233	3	
Laboratory Science Sequence		4		Laboratory Science Sequence		4	
Analytic Geometry & Calculus I	MAT 131	4		Humanities/SS Elective		3	
Data Science Programming	CMP 262	<u>3</u>		Discrete Mathematics	MAT 225	<u>4</u>	
	TOTAL	14			TOTAL	14	

HUMANITIES: Select one, three-credit Humanities elective from the list of approved General Education courses. PHL 114 Ethics is the recommended elective.

SOCIAL SCIENCE: Select one, three-credit Social Science elective from the list of approved General Education courses. PSY 113 General Psychology is the recommended elective.

HUMANITIES/SOCIAL SCIENCE: Select one, three-credit Humanities or Social Science elective from the list of approved General Education courses.

LABORATORY SCIENCE SEQUENCE: Choose a two-part laboratory science sequence from the following: PHY 125/126 and PHY 127/128, General Physics Lab and Lecture I & II, CHM 125/126 and CHM 127/128, General Chemistry Lab and Lecture I & II or BIO 101 and BIO 102, Anatomy and Physiology I & II.

HONORS COURSES: You may be eligible to take honors courses. Discuss this option with your Academic Advisor.

GENERAL EDUCATION: [Click here for the most recent General Education course list.](#)