

**COUNTY COLLEGE OF MORRIS**  
**CURRICULUM CHECK SHEET**  
**Requirements for Graduation**  
**A.S. DEGREE**

**#2501**  
**COMPUTER SCIENCE**  
**Data Science Option**

Name: \_\_\_\_\_

SSN or ID \_\_\_\_\_ Total Transfer Credits \_\_\_\_\_

Date \_\_\_\_\_

**Spring 2023**

COURSE	CODE	CR	GR	TR
<b>GENERAL EDUCATION FOUNDATION (35 CR)</b>				
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		
DIVERSITY (3 CR)				
Choose from General Education list (Diversity)		3		
HUMANITIES (3 CR)				
Choose from General Education course list (Humanities)*		3		
GENERAL EDUCATION (8 CR) *				
Laboratory Science Sequence		4		
Laboratory Science Sequence		4		
<b>COMPUTER SCIENCE CORE (25 CR)</b>				
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		
CIS ELECTIVE*+		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 Advisors 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](http://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.

**COMPUTER SCIENCE**  
**Data Science Option**  
**#2501**  
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.*

<b>SEMESTER I</b>			<b>CREDITS</b>	<b>SEMESTER II</b>			<b>CREDITS</b>
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>	
	<b>TOTAL</b>	16			<b>TOTAL</b>	16	
<b>SEMESTER III</b>				<b>SEMESTER IV</b>			
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		Diversity Elective		3	
Data Science Programming <b>OR</b>	CMP 262	3		Discrete Mathematics	MAT 225	<u>4</u>	
Machine Learning	CMP 264				<b>TOTAL</b>	14	
	<b>TOTAL</b>	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.

**DIVERSITY:** Select one, three-credit Diversity elective from the list of approved General Education courses.

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

**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.

**COMPUTER INFORMATION SYSTEMS ELECTIVES:** Select CMP 262 Data Science Programming or CMP 264 Machine Learning.

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