COUNTY COLLEGE OF MORRIS
CURRICULUM CHECK SHEET   **#2150**
Requirements for Graduation   **SCIENCE AND MATH DEGREE**
A. S. DEGREE   **Mathematics Option**

FALL 2023

COURSE	CODE	CR	G	TR
General Education Foundation (32 CR)				
COMMUNICATION (6 CR)				
English Composition I	ENG 111	3		
English Composition II	ENG 112	3		
MATH/SCIENCE/TECHNOLOGY (11 CR)				
Restricted Laboratory Science*		4		
Restricted Laboratory Science*		4		
Technology Elective**#		3		
SOCIAL SCIENCE (3 CR)				
Choose from General Education course list (Social Science)				
		3		
HUMANITIES (3 CR)				
Choose from General Education course list (Humanities)				
		3		
SOCIAL SCIENCE OR HUMANITIES (3 CR)				
Choose from General Education course list (Social Science or Humanities)				
		3		
GENERAL EDUCATION ELECTIVES (6 CR)				
Choose from General Education course list (General Education)#				
		3		
		3		
MATHEMATICS CORE (15 CR)				
Analytic Geometry & Calculus I	MAT 131	4		
Analytic Geometry & Calculus II	MAT 132	4		
Calculus III	MAT 230	4		
Linear Algebra	MAT 228	3		
Free Electives+#		6		
RESTRICTED ELECTIVE (7 CR)				
Discrete Mathematics **OR**	MAT 225	4		
Ordinary Differential Equations	MAT 244	4		
Computer Programming for Engineers **OR**	ENR 125	3		
Introduction to Data Science#	MAT 114	3		
	TOTAL	60		

NOTES:

This is an unofficial document and shouldbe used for academic planning purposes only. All students are required to see their Academic Advisors each semester to discussand approve their selection of courses beforethey register. Due to continual program revisions mandated by accrediting agencies and/orchanges in state mandated requirements,students should consult their academic advisor when selecting courses.

If you need the name of your academicadvisor, contact the Math Department office, SH 319, 973-328-5707 or pgalardi@ccm.edu.

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

*See reverse side for choices.

**You may take CMP 128, CMP 131, or CMP 135.

+Please discuss these choices with your Academic Advisor. Students interested in using free elective credits to complete the Internship-Quantitative Analysis (MAT 221, MAT 222, or MAT 223), contact kfitzpatrick@ccm.edu

#Students interested in completing the Data Analytics Certificate should choose these elective choices carefully and consult with kfitzpatrick@ccm.edu. See back page for more information.

SCIENCE & MATH DEGREE
Mathematics Option
#2150
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
English Composition I	ENG 111	3	English Composition II	ENG 112	3
Humanities Elective		3	Social Science or Humanities		3
Calculus I	MAT 131	4	Calculus II	MAT 132	4
Laboratory Science		4	Laboratory Science		4
Social Science Elective		3			
	TOTAL	17		**TOTAL**	14

SEMESTER III			SEMESTER IV		
Discrete Mathematics **OR**	MAT 225	4	General Education ElectiveFree		3
Ordinary Differential Equations	MAT 244		Elective		3
Technology Elective		3	Linear Algebra	MAT 228	3
Free Elective		3	Computer Programming **OR**	ENR 125	3
Calculus III	MAT 230	4	Introduction to Data Science	MAT 114	
			General Education Elective		3
	TOTAL	14		**TOTAL**	15

GENERAL EDUCATION ELECTIVES: Please select appropriate courses from the approved list of General Education courses for Humanities, Social Science, Communication or Language, and Math-Science-Technology. Students who plan to transfer to a B.A. (Bachelor of Arts) program should take COM 109, Speech Fundamentals, since this is required under communication for that degree. Click here for the most recent General Education course list.

RESTRICTED LABORATORY SCIENCE: Any two-part sequence of the following:
BIO 121-122 General Biology I, II   BIO 101-102 Anatomy & Physiology I, II
CHM 125/126 – 127/128 Gen. Chemistry I, II   PHY 125/126 – 127/128 Gen. Physics I, II

DATA ANALYTICS CERTIFICATE OF ACHIEVEMENT: Students interested in obtaining this certificate should consider the following electives:

Technology Elective (3-Credits):	CMP 131 Fundamentals of Programming
General Education Electives (4-Credits):	MAT 130 Probability and Statistics
Restrictive Electives (3-Credits):	MAT 114 Intro to Data Science
Free Electives (3-Credits):	CMP 241 Database Programming
Free Electives (3-Credits):	**One of the Following Courses Below:**

- CMP 262 Data Science Programming
- ENR 264/CMP 264 Machine Learning
- MAT 223 Internship-Quantitative Analysis

Note: Students will not receive credit towards graduation for more than one of the following courses: MAT 124, Statistics and MAT 130, Probability and Statistics.

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