COUNTY COLLEGE OF MORRIS
CURRICULUM CHECK SHEET **#2180**
Requirements for Graduation **ENGINEERING SCIENCE**
A. S. DEGREE

FALL 2024

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)				
Analytic Geometry & Calculus I*	MAT 131	4		
Ordinary Differential Equations	MAT 244	4		
General Chemistry I – Lecture	CHM 125	3		
General Chemistry I – Lab	CHM 126	1		
SOCIAL SCIENCE (3 CR)				
Principles of Economics I	ECO 211	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)				
Calculus III	MAT 230	4		
Choose a science and its lab from the following:				
General Chemistry II – Lecture	CHM 127	3		
General Chemistry II – Lab	CHM 128	1		
OR				
Engineering Physics III Lecture	PHY 232	3		
Engineering Physics III Lab	PHY 233	1		
ENGINEERING SCIENCE CORE (25 CR)				
Analytic Geometry & Calculus II	MAT 132	4		
Engineering Graphics	ENR 121	2		
Introduction to Engineering	ENR 130	1		
Engineering Mechanics I	ENR 223	3		
Engineering Mechanics II	ENR 224	3		
Restricted Engineering Elective**		3		
Engineering Physics I – Lecture	PHY 130	4		
Engineering Physics II – Lecture	PHY 133	4		
Engineering Physics II – Lab	PHY 134	1		
	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 the Engineering Technologies/Engineering Science Department in the Advanced Manufacturing and Engineering Center, room 104, 973-328-5760.

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

*SPECIAL NOTE: Students may need to take MAT 123 Pre-Calculus (or a lower-level math class) rather than MAT 131 Analytic Geometry & Calculus I the first semester. Please see your Academic Advisor so an alternative plan of study may be established.

**RESTRICTED ENGINEERING ELECTIVE: See back page for notes.

ENGINEERING SCIENCE
#2180
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
General Chemistry I – Lecture	CHM 125	3	Analytic Geometry & Calculus II	MAT 132	4
General Chemistry I – Lab	CHM 126	1	Engineering Physics I	PHY 130	4
Analytic Geometry & Calculus I	MAT 131	4	Humanities/Social Science Elective		3
Introduction to Engineering	ENR 130	1	Restricted Engineering Elective		3
Engineering Graphics	ENR 121	2			
	TOTAL	14		**TOTAL**	17
SEMESTER III			**SEMESTER IV**		
Engineering Physics II – Lecture	PHY 133	4	Ordinary Differential Equations	MAT 244	4
Engineering Physics II – Lab	PHY 134	1	Engineering Mechanics II	ENR 224	3
Calculus III	MAT 230	4	Humanities Elective		3
Engineering Mechanics I	ENR 223	3	General Chemistry II – Lecture*	CHM 127	3
Principles of Economics I	ECO 211	3	General Chemistry II – Lab **OR**	CHM 128	1
			Engineering Physics III Lecture	PHY 232	
			Engineering Physics III Lab	PHY 233	
	TOTAL	15		**TOTAL**	14

HUMANITIES ELECTIVES: Please see the approved General Education course list under the Humanities section.

HUMANITIES/SOCIAL SCIENCE ELECTIVES: Please see the approved General Education course list under Humanities/Social Science sections.

GENERAL EDUCATION: Click here for the most recent General Education course list.

RESTRICED ENGINEERING ELECTIVE: See your advisor for course selection. Choices include ENR 125 Computer Programming for Engineers, ENR 222 Mechanics of Solids, ENR 235 Engineering Circuit Analysis I, ENR 236 Engineering Circuit Analysis Laboratory I.

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