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

## #2500 COMPUTER SCIENCE

# **FALL 2023**

COURSE	CODE	CR	GR	TR
GENERAL EDUCATION FOUNDATION (35	5/36 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		
Analytic Geometry & Calculus II**	MAT 132	4		
SOCIAL SCIENCE (3 CR)				
Choose from General Education list (Social Scient	nce)	3		
DIVERSITY (3 CR)				
Choose from General Education list (Diversity)		3		
Choose from General Education list (Diversity)		3		
HUMANITIES (3 CR)				
Choose from General Education course list (Hum	anities)	3		
GENERAL EDUCATION (8 CR)*				
Laboratory Science Sequence		4		
Laboratory Science Sequence		4		
COMPUTER SCIENCE CORE (25 CR)				
Computer Science I	CMP 128	3		
Computer Science II (Java)	CMP 129	3		
Computer Architecture & Assembly Language	CMP 230	3		
Data Structures and Algorithms (CS III)	CMP 233	3		
Software Engineering	CMP 280	3		
Discrete Mathematics	MAT 225	4		
CIS Electives*		6		
	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 academic advisor, contact Department of Information Technologies in Emeriti Hall, D222 at (973) 328-5780.

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

<sup>\*</sup>See back page for more information.

<sup>\*\*</sup>Students who meet or exceed required Math thresholds should consult with an advisor about Math course placement.

## COMPUTER SCIENCE #2500

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		<b>CREDITS</b>
Computer Science I	CMP 128	3	Computer Science II (Java)	CMP 129	3
Precalculus	MAT 123	3 4	Computer Architecture &	CMP 230	3
Social Science Elective		3	Assembly Language		
English Composition I	ENG 111	3	English Composition II	ENG 112	3
Humanities Elective		<u>3</u>	Analytic Geometry & Calculus I	MAT 131	4
			Diversity Elective		<u>3</u>
	TOTAL	16		TOTAL	16
SEMESTER III			SEMESTER IV		
Data Structures & Algorithms	CMP 233	3	Laboratory Science Sequence		4
Laboratory Science Sequence		4	CIS Elective		3
Analytic Geometry & Calculus II	MAT 132	2 4	Software Engineering	CMP 280	3
CIS Elective		<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.

**SOCIAL SCIENCE**: Select one three-credit Social Science elective from the list of approved General Education courses.

**DIVERSITY:** Select one three-credit Diversity 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, BIO 101 and BIO 102, Anatomy and Physiology I & II, BIO 121/122 General Biology I & II, PHY 130 Engineering Physics I and PHY 133/134 Engineering Physics II/Laboratory for Engineering Physics II.

#### COMPUTER INFORMATION SYSTEMS ELECTIVES:

COMPUTER INFORMATION SYSTEMS ELECTIVES:				
*CMP 108 Game Design Concepts	*CMP 239 Internet & Web Page Design			
*CMP 120 Foundations of Information Security	CMP 241 Database Programming (SQL) (CMP 128 prerequisite)			
*CMP 124 Network Security	CMP 243 Ethical Hacking & Sys. Defense (CMP 124 prerequisite)			
*CMP 125 Information Security Management	CMP 244 Web Design II (CMP 239 prerequisite)			
*CMP 130 Intro to IT	CMP 246 Operating Systems (CMP 129 prerequisite)			
*CMP 131 Fundamentals of Programming (Python)	CMP 255 Linux (CMP 128 prerequisite)			
*CMP 149 Critical Game Play	CMP 261 Digital Forensics II (Spring Only)			
CMP 150 Game Programming (CMP 128 prerequisite)	CMP 271 Adv Mobile App Programming (Spring only)			
*CMP 160 Digital Forensics I	CMP 291/292 Special topics in IT			
CMP 170 Mobile App Development (CMP 128 prerequisite)				
CMP 262 Data Science Programming (Spring only, CMP 131 prerequisite)				

MAT 114 Introduction to Data Science (MAT 016 or MAT 120 prerequisite or equivalent exemption)

Please see your academic advisor for recommendations.

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.

<sup>\*</sup>Course does not have a pre-requisite course requirement