

COMPUTER ENGINEERING

Four-Semester Transfer Sequence for UMCP

UNIVERSITY of MARYLAND			MONTGOMERY COLLEGE		
<i>Semester 1</i>					
CHEM 135	Gen Chemistry for Engineers	3	CHEM 135	Chemistry for Engineers (or CHEM 132 Prin. of Chemistry II)	4
ENEE 101	Intro to Elec. & Comp. Eng.*	3	ENGL 102	Critical Reading, Writing & Research	3
MATH 140	Calculus I	4	ENES 100	Intro. to Engineering Design	3
CMSC 131	Object Oriented Program. I**	4	MATH 181	Calculus I	4
ENGL 101	Intro to Writing	3			
Total Credits		17	Total Credits		14
<i>Semester 2</i>					
CMSC 132	Object Oriented Program. II**	4	CMSC 203	Computer Science I**	4
MATH 141	Calculus II	4	MATH 182	Calculus II	4
ENES 100	Intro. to Engineering Design	3	PHYS 161	Physics I	3
PHYS 161	Physics I	3	General Education Distribution Course***		3
	Gen. Ed. Requirements***	3	General Education Distribution Course***		3
Total Credits		17	Total Credits		17
<i>Semester 3</i>					
ENEE 222	Discrete Signal Analysis	4	CMSC 204	Computer Science II**	4
ENEE 244	Digital Logic Design	3	ENEE 244	Digital Logic Design	3
CMSC 250	Intro to Discrete Structures	4	MATH 282	Differential Equations	3
MATH 246	Differential Equations	3	PHYS 262	Physics II	4
PHYS 260/1	Physics II/Lab	4	Gen. Ed. Humanities COMM 108 recommended***		3
Total Credits		18	Total Credits		17
<i>Semester 4</i>					
ENEE 205	Electric Circuits	4	CMSC 207	Intro to Discrete Structures	4
ENEE 245	Digital Circuits and Systems	2	ENEE 207	Electric Circuits	4
CMSC 216	Intro to Computer Systems*	4	ENEE 222	Discrete Signal Analysis	4
	Comp Eng. Technical Elective	3	ENEE 245	Digital Circuits and Systems Lab	2
	Gen. Ed. Requirements***	3	General Education Distribution Course***		3
Total Credits		16	Total Credits		17
GRAND TOTAL		68	GRAND TOTAL#		65

[UMCP BS Computer Engineering Curriculum](#)

[MC AS Computer Engineering Curriculum](#)

Students completing these courses will have four general education courses to transfer.

* MC does not have courses equivalent to UMCP ENEE 101 Intro to Elec. & Comp. Eng. or CMSC 216 Intro to Computer Systems.

** Students completing MC courses CMSC 203 and CMSC 204 during the 2018-2019 or 2019-2020 academic years will be able to transfer these to UMCP as equivalent to CMSC 131 and CMSC 132. Students who previously completed these courses may take an assessment test to place out of these courses or take these courses through MTAP prior to transfer.

*** Follow this link for information about the 4-year programs [General Education](#) requirements at UMCP.

COMPUTER ENGINEERING

Suggested Five-Semester Transfer Sequence for UMCP

Semester 1

CHEM 131	Principles of Chemistry I ¹	4
ENGL 101	Intro. to College Writing	3
ENES 100	Intro. to Engineering Design	3
MATH 165	Precalculus	4
Total Credits		14

Semester 1 Curriculum Prerequisites*

CHEM 099	Introductory Chemistry ²	0
MATH 050	Foundations of Algebra ³	0
MATH 098	Intro to Trigonometry ³	0

Semester 2

CHEM 132	Principles of Chemistry II ¹	4
ENGL 102	Crit. Read., Writing & Research	3
MATH 181	Calculus I	4
General Education Distribution Course		3
Total Credits		14

Courses Usually Offered During Summer Terms*

CHEM 131	Principles of Chemistry I	4
CHEM 132	Principles of Chemistry II	4
CMSC 140	Introduction to Programming	3
ENEE 244	Digital Logic Design	3
ENGL 102	Crit. Read., Writing & Research	3
ENES 100	Introduction to Engineering Design	3
MATH 165	Precalculus	4
MATH 181	Calculus I	4
MATH 182	Calculus II	4
MATH 280	Multivariable Calculus	4
MATH 282	Differential Equations	3
PHYS 161	Physics I	3

Semester 3

MATH 182	Calculus II	4
PHYS 161	Physics I	3
CMSC 203	Computer Science I**	4
General Education Distribution Course		3
Gen. Ed. Human. COMM 108 recommended**		3
Total Credits		17

Semester 4

CMSC 204	Computer Science II	4
MATH 282	Differential Equations	3
PHYS 262	Physics II	4
ENEE 244	Digital Logic Design	3
General Education Distribution Course		3
Total Credits		17

Semester 5

CMSC 207	Intro to Discrete Structures	4
ENEE 207	Electric Circuits	4
ENEE 222	Elem. of Disc. Sig. Analysis	4
ENEE 245	Dig. Circuits & Systems Lab	2
Total Credits		14

GRAND TOTAL

76**

Advising Notes

¹CHEM 131/132 may be more appropriate than CHEM 135 for students who are taking MATH 050/MATH098.

²CHEM 099 or a passing score on the Chemistry placement exam is required for CHEM 131 or CHEM 135.

³MATH 050 and MATH 098 or equivalents are prerequisites for MATH 165.

Students taking the AELW/AELR course sequence should meet with an engineering advisor to determine appropriate math, physics, and engineering course enrollments.

*Students may meet prerequisites for first-semester curriculum courses by either successfully completing appropriate coursework in high school or achieving qualifying scores on SAT, AP, IB, or Accuplacer assessments. Students needing to complete prerequisites to first-semester curriculum may consider taking summer term courses.

**Note: ENGL 101 and MATH 165 do not transfer as part of the BS engineering degree requirements at UMCP.