COMPUTER ENGINEERING

Four-Semester Transfer Sequence for UMCP

Note: This optimized transfer sequence DOES NOT satisfy the MC AS degree requirements.

UNIVERSITY of MARYLAND				MONTGOMERY COLLEGE			

Semester 1

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

Semester 2

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

Semester 3

CMSC 216	Intro to Computer Systems*	4		CMSC 204	Computer Science II*	4
CMSC 250	Intro to Discrete Structures	4		ENEE 244	Digital Logic Design	3
PHYS 260/1	Physics II/Lab	4		MATH 282	Differential Equations	3
ENEE 244	Digital Logic Design Tech.	3		PHYS 262	Physics II	4
				General Education Distribution Course**		3
Total Credits		15		Total Credits		17

Semester 4

ENEE 245	Digital Circuits and Systems	2		CMSC 207	Intro to Discrete Structures	4
ENEE 205	Electric Circuits	4		ENEE 207	Electric Circuits	4
ENEE 222	Discrete Signal Analysis	4		ENEE 222	Discrete Signal Analysis	4
MATH 246	Differential Equations	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		**65**		**GRAND TOTAL**[#]		**65**

UMCP BS Computer Engineering Curriculum   MC AS Computer Engineering Curriculum

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

** MC courses CMSC 203 and CMSC 204 do not transfer to UMCP as equivalent to CMSC 131 and CMSC 132. Students planning to transfer to UMCP 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

Note: This optimized transfer sequence DOES NOT satisfy the MC AS degree requirements.

Semester 1

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

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

Semester 3

MATH 182	Calculus II	4
PHYS 161	Physics I	3
CMSC 203	Computer Science I	4
General Education Distribution Course		3
General Education Distribution Course		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**

Semester 1 Curriculum Prerequisites*

CHEM 099	Introductory Chemistry[2]	0
MATH 096	Intermediate Algebra[3]	0
MATH 098	Intro to Trigonometry[3]	0

Courses Usually Offered During Summer Terms*

CHEM 131	Principles of Chemistry I	4
CHEM 132	Principles of Chemistry II	4
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 282	Differential Equations	3
PHYS 161	Physics I	3

Advising Notes

[1]CHEM 131/132 may be more appropriate than CHEM 135 for students who are taking MATH 096/MATH098.

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

[3]MATH 096 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.