

FIRE PROTECTION ENGINEERING

Four-Semester Transfer Sequence for UMCP

UNIVERSITY of MARYLAND				MONTGOMERY COLLEGE			
<i>Semester 1</i>							
ENES 100	Intro. to Engineering Design	3		CHEM 135	Chem. for Engineers (or CHEM 132)	4	
MATH 140	Calculus I	4		ENGL 102	Critical Reading, Writing & Research	3	
CHEM 135	Gen. Chemistry for Engineers	3		ENES 100	Intro. to Engineering Design	3	
ENGL 101	Intro to Writing	3		MATH 181	Calculus I	4	
Total Credits		13		Total Credits		14	
<i>Semester 2</i>							
ENES 102	Mechanics I	3		ENES 102	Statics	3	
MATH 141	Calculus II	4		MATH 182	Calculus II	4	
PHYS 161	Physics I	3		PHYS 161	Physics I	3	
	Gen. Ed. Requirements**	3			General Education Distribution Course**	3	
	Gen. Ed. Requirements**	3			Gen. Ed. Humanities COMM 108 recommended**	3	
Total Credits		16		Total Credits		16	
<i>Semester 3</i>							
ENFP 250	Intro to Life Safety Analysis*	3		ENES 220	Mechanics of Materials	3	
ENES 221	Dynamics	3		ENES 232	Thermodynamics	3	
MATH 246	Differential Equations	3		MATH 280	Multivariable Calculus	4	
MATH 206	Introduction to MATLAB	1		PHYS 262	Physics II	4	
PHYS 260/1	Physics II/Lab	4			General Education Distribution Course**	3	
	Gen. Ed. Requirements**	3		Total Credits		17	
Total Credits		17		Total Credits		17	
<i>Semester 4</i>							
ENES 232	Thermodynamics	3		ENES 221	Dynamics	3	
ENES 220	Mechanics II	3		ENES 206	MATLAB for Eng (or ENES 240)***	1	
ENFP 300	Fire Protect. Fluid Mechanics*	3		PHYS 263	Physics III (or MATH 284)	4	
MATH 241	Calculus III (or MATH 240)	4		MATH 282	Differential Equations	3	
	Gen. Ed. Requirements**	3			General Education Distribution Course**	3	
Total Credits		16		Total Credits		14	
GRAND TOTAL		62		GRAND TOTAL		61	

[UMCP BS Fire Protection Engineering Curriculum](#)

[MC AS Fire Protection Engineering Curriculum](#)

* ENFP 250(3) and ENFP 300(3), for which MC has no equivalents, remain to be taken at UMCP through MTAP or after transfer. ENFP 300 is a prerequisite for junior-level courses ENFP 310 and ENFP 312.

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

*** ENES 240 Engineering Computation (3) can be substituted for ENES 206 MATLAB for Engineers (1).

[Maryland Transfer Advantage Program \(MTAP\)](#): Students planning transfer to UMCP should enroll in MTAP as soon as possible. Benefits include access to advising transfer advising at UMCP and tuition discounts on courses taken through MTAP at UMCP.

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Suggested Five-Semester Transfer Sequence for UMCP

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 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., Writ. & 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
ENGL 102	Critical Reading, Writing & Research	3
ENES 100	Introduction to Engineering Design	3
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
ENES 206	MATLAB for Engineers	1
ENES 102	Statics	3
General Education Distribution Course		3
Total Credits		14

Semester 4

ENES 221	Dynamics	3
MATH 282	Differential Equations	3
PHYS 262	Physics II	4
General Education Distribution Course		3
Total Credits		13

Semester 5

ENES 232	Thermodynamics	3
ENES 220	Mechanics of Materials	3
MATH 280	Multivariable Calculus	4
ENFP 300	Fire Protection Fluid Mechanics	3
General Education Distribution Course		3
Total Credits (13 or 16)		16

Advising Notes

¹CHEM 131/132 may be more appropriate than CHEM 135 for students who are taking MATH 050/MA098.

²CHEM 099 or a passing score on the Chemistry placement exam is required for CHEM 131 or CHEM135.

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

Students taking the American English Language Writing (AELW)/American English Language Reading (AELR) course sequence should meet with an engineering advisor to determine appropriate math, physics, and engineering course enrollments.

GRAND TOTAL

71**

*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.

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