AEROSPACE ENGINEERING

Four-Semester Transfer Sequence for UMCP

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

UNIVERSITY of MARYLAND

Semester 1

ENAE 100	Aerospace Engineering Prof.	1
ENES 102	Mechanics I	3
MATH 140	Calculus I	4
CHEM 135	Gen. Chemistry for Engineers	3
ENGL 101	Intro to Writing	3
Total Credits		14

Semester 2

ENAE 202	Aerospace Computing	3
ENES 100	Intro. to Engineering Design	3
MATH 141	Calculus II	4
PHYS 161	Physics I	3
	Gen. Ed. Requirements**	3
Total Credits		16

Semester 3

ENES 220	Mechanics II	3
ENAE 283	Intro. to Aerosp. Systems*	3
MATH 241	Calculus III	4
PHYS 260/1	Physics II/Lab	4
	Gen. Ed. Requirements**	3
Total Credits		17

Semester 4

ENAE 200	The Aerospace Profession II*	1
ENME 232	Thermodynamics	3
MATH 461	Linear Algebra (or 240 [4])	3
MATH 246	Differential Equations	3
PHYS 270/1	Physics III/Lab	4
	Gen. Ed. Requirements**	3
Total Credits		17

GRAND TOTAL 64

UMCP BS Aerospace Engineering Curriculum

MONTGOMERY COLLEGE

CHEM 135	Chemistry for Engineers	4
ENGL 102	Critical Reading, Writing & Research	3
ENES 100	Intro. to Engineering Design	3
MATH 181	Calculus I	4
General Education Distribution Course**		3
Total Credits		17

ENES 102	Statics	3
MATH 182	Calculus II	4
PHYS 161	Physics I	3
CMSC 140	Introduction to Programming***	3
General Education Distribution Course**		3
Total Credits		16

ENES 220	Mechanics of Materials	3
MATH 280	Multivariable Calculus	4
PHYS 262	Physics II	4
ENES 240	Sci. & Engineering Computation***	3
General Education Distribution Course**		3
Total Credits		17

MATH 284	Linear Algebra	4
ENES 232	Thermodynamics	3
MATH 282	Differential Equations	3
PHYS 263	Physics III	4
General Education Distribution Course**		3
Total Credits		17

GRAND TOTAL 67

MC AS Aerospace Engineering Curriculum

* ENAE 200(1), and 283(3) for which MC has no equivalent, remain to be taken in UMCP. Students need to take ENAE 283 in order to achieve full junior standing upon transfer. This must be done in summer term prior to fall term transfer.

** Follow this link for information about the 4-year programs General Education requirements at UMCP.

*** CMSC140 (3) and ENES240 (3) combined can be equivalent to ENAE 202 (3).

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.

AEROSPACE 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	Intro. to College Writing	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., Writ. & Research	3
MATH 181	Calculus I	4
CMSC 140	Introduction to Programming	3
General Education Distribution Course		3
Total Credits		17

Semester 3

MATH 182	Calculus II	4
PHYS 161	Physics I	3
ENES 240	Sci. & Eng. Computation	3
ENES 102	Statics	3
General Education Distribution Course		3
Total Credits		16

Semester 4

MATH 284	Linear Algebra	4
MATH 280	Multivariable Calculus	4
PHYS 262	Physics II	4
General Education Distribution Course		3
Total Credits		15

Semester 5

ENES 232	Thermodynamics	3
ENES 220	Mechanics of Materials	3
MATH 282	Differential Equations	3
PHYS 263	Physics III	4
General Education Distribution Course		3
Total Credits		16

GRAND TOTAL **78****

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
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

Advising Notes

[1]CHEM 131/132 may be more appropriate than CHEM 135 for students who are taking MATH 096/MA098.

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

[3]MATH 096 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.

*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.

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.