

AEROSPACE ENGINEERING - BACHELOR OF SCIENCE IN AEROSPACE ENGINEERING

A Suggested Plan of Study for Students

This roadmap assumes student placement in MATH 1511G Calculus and Analytic Geometry I and ENGL 1110G Composition I. The contents and order of this roadmap may vary depending on initial student placement in mathematics and English. It is only a suggested plan of study for students and is not intended as a contract. Course availability may vary from fall to spring semester and may be subject to modification or change.

Freshman

Fall		Credits
MATH 1511G	Calculus and Analytic Geometry I ¹	4
ENGR 190	Introduction to Engineering Mathematics	4
CHEM 1215G	General Chemistry I Lecture and Laboratory for STEM Majors	4
ENGL 1110G	Composition I	4
Credits		16

Spring

MATH 1521G	Calculus and Analytic Geometry II	4
PHYS 1310G & PHYS 1310L	Calculus -Based Physics I and Calculus -Based Physics I Lab	4
ENGR 110	Introduction to Engineering Design	3
English Composition - Level 2 ²		3
Area IV: Social/Behavioral Sciences ²		3
Credits		17

Sophomore

Fall		Credits
MATH 2530G	Calculus III	3
PHYS 1320G	Calculus -Based Physics II	3
ENGR 233	Engineering Mechanics I	3
M E 210	Electronics and System Engineering	3
ENGR 217	Manufacturing Processes	3
ENGR 217 L	Manufacturing Processes Lab	1
Credits		16

Spring

M E 228	Engineering Analysis I	3
ENGR 234	Engineering Mechanics II	3
M E 261	Numerical Methods	3
M E 240	Thermodynamics	3
Oral Communications Elective ²		3
Credits		15

Junior

Fall		Credits
M E 328	Engineering Analysis II	3
A E 339	Aerodynamics I	3
A E 362	Orbital Mechanics	3
A E 364	Flight Dynamics and Controls	3
C E 301	Mechanics of Materials	3
M E 349	MAE Career Seminar	1
Credits		16

Spring

A E 424	Aerospace Systems Engineering	3
A E 439	Aerodynamics II	3
A E 363	Aerospace Structures	3
M E 345	Experimental Methods I	3
M E 341	Heat Transfer	3
Credits		15

Senior

Fall		Credits
CHME 361	Engineering Materials	3
A E 419	Propulsion	3
A E 447	Aerofluids Laboratory	3
Area V: Humanities ²		3
Area VI: Creative and Fine Arts ²		3
Credits		15

Spring

A E 428	Aerospace Capstone Design	3
Aerospace engineering senior elective		3
Viewing a Wider World ³		3
Viewing a Wider World ³		3
Credits		12
Total Credits		122

¹ MATH 1511G Calculus and Analytic Geometry I is required for the degree but students may need to take any prerequisites needed to enter MATH 1511G first.

² See the General Education (<https://catalogs.nmsu.edu/nmsu/general-education-viewing-wider-world/>) section in this catalog for a full list of courses.

³ See the Viewing a Wider World (<https://catalogs.nmsu.edu/nmsu/general-education-viewing-wider-world/#viewingawiderworldtext>) section in this catalog for a full list of courses.