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 or MATH 1511H	Calculus and Analytic Geometry I [1] or Calculus and Analytic Geometry I Honors	4
ENGR 190	Introduction to Engineering Mathematics	4
CHEM 1215G	General Chemistry I Lecture and Laboratory for STEM Majors	4
ENGL 1110G or ENGL 1110H	Composition I or Composition I Honors	4
	Credits	**16**
Spring		
MATH 1521G or MATH 1521H	Calculus and Analytic Geometry II or Calculus and Analytic Geometry II Honors	4
PHYS 1310G & PHYS 1310L	Calculus -Based Physics I and Calculus -Based Physics I Lab	4
ENGR 110	Introduction to Engineering Design	3
ENGL 2210G or ENGL 2210H	Professional and Technical Communication or Professional and Technical Communication	3
Area IV: Social/Behavioral Sciences [2]		3
	Credits	**17**
Sophomore		
Fall		
MATH 2530G	Calculus III	3
ENGR 233	Engineering Mechanics I	3
PHYS 1320G	Calculus -Based Physics II	3
ENGR 140	Introduction to Programming and Embedded Systems	4
ENGR 217	Manufacturing Processes	3
ENGR 217 L	Manufacturing Processes Lab	1
	Credits	**17**
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
COMM 1115G or COMM 1130G or HNRS 2175G	Introduction to Communication or Public Speaking or Introduction to Communication Honors	3
	Credits	**15**
Junior		
Fall		
M E 328	Engineering Analysis II	3
A E 339	Aerodynamics I	3
A E 362	Orbital Mechanics	3
C E 301	Mechanics of Materials	3
CHME 361	Engineering Materials	3
M E 349	MAE Career Seminar	1
	Credits	**16**
Spring		
A E 363	Aerospace Structures	3
A E 439	Aerodynamics II	3
A E 424	Aerospace Systems Engineering	3
M E 345	Experimental Methods I	3
M E 341	Heat Transfer	3
	Credits	**15**
Senior		
Fall		
A E 428	Aerospace Capstone Design	3
A E 447	Aerofluids Laboratory	3
A E 364	Flight Dynamics and Controls	3
Area V: Humanities [2]		3
Area VI: Creative and Fine Arts [2]		3
	Credits	**15**
Spring		
A E 419	Propulsion	3
Aerospace engineering senior elective		3
Viewing a Wider World [3]		3
Viewing a Wider World [3]		3
	Credits	**12**
	Total Credits	**123**

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.