

GENERAL ENGINEERING - ASSOCIATE OF SCIENCE

NMSU Alamogordo 2024-2025 Catalog

The student must work closely with an Advisor to select the best options for a successful transition to the four-year institution of his/her choice.

A grade of C- or better is required in all courses for the degree.

Total Credits Required for Degree: 60

Students must complete all University degree requirements, which include: General Education requirements and elective credits to total at least 60 credits. Developmental coursework will not count towards the degree requirements and/or elective credits, but may be needed in order to take the necessary English and Mathematics coursework.

Prefix	Title	Credits
General Education Requirements		
Courses specified in the General Education areas below are Program required courses that will also fulfill General Education requirements.		
<i>Area I: Communications</i>		
<i>English Composition - Level 1</i>		
ENGL 1110G	Composition I	4
<i>English Composition - Level 2</i>		
ENGL 2210G	Professional and Technical Communication Honors	3
<i>Oral Communication</i>		
COMM 1115G	Introduction to Communication	3
<i>Area II: Mathematics</i>		
MATH 1511G	Calculus and Analytic Geometry I ¹	4
<i>Areas III/IV: Laboratory Science and Social/Behavioral Sciences</i>		
CHEM 1215G	General Chemistry I Lecture and Laboratory for STEM Majors	4
PHYS 1310G & PHYS 1310L	Calculus -Based Physics I and Calculus -Based Physics I Lab	4
Select one course from Area IV: Social/Behavioral Sciences (3 credits) ²		
<i>Area V: Humanities</i>		
Select one course from Area V: Humanities ²		
<i>Area VI: Creative/Fine Arts</i>		
Select one course from Area VI: Creative/Fine Arts ²		
<i>General Education Elective</i>		
MATH 1521G	Calculus and Analytic Geometry II	4
Program Requirements		
CHEM 1225G	General Chemistry II Lecture and Laboratory for STEM Majors	4
or GEOL 1110G	Physical Geology	
DRFT 109	Computer Drafting Fundamentals	3
ECON 2110G	Macroeconomic Principles	3
ENGR 100G	Introduction to Engineering	3
ENGR 111	Mathematics for Engineering Applications	3
Select 6-8 credits from the following:		
C E 233	Mechanics-Statics	6-8
CHEM 1225G	General Chemistry II Lecture and Laboratory for STEM Majors	
GEOL 1110G	Physical Geology	
MATH 2530G	Calculus III	

PHYS 1320G & PHYS 1320L	Calculus -Based Physics II and Calculus -Based Physics II Lab	3
Elective, to bring the total credits to 60 ³		3
Total Credits		60

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

² See the General Education Section (<https://catalogs.nmsu.edu/alamogordo/general-information/general-education-new-mexico-common-core/>) of the catalog for a full list of courses.

³ Elective credit may vary based on prerequisites, dual credit, AP credit, and/or certificate coursework. The amount indicated in the requirements list is the amount needed to bring the total to 60 credits and may appear in variable form based on the degree. However students may end up needing to complete more or less on a case-by-case basis and students should discuss elective requirements with their advisor.

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A Suggested Plan of Study - General Engineering

Additional classes may be needed based on placement test results and course prerequisites. Visit with an advisor for help with creating a customized plan.

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First Year		Credits
Fall		
CHEM 1215G	General Chemistry I Lecture and Laboratory for STEM Majors	4
ENGL 1110G	Composition I	4
ENGR 100G	Introduction to Engineering	3
MATH 1511G	Calculus and Analytic Geometry I ¹	4
Credits		15
Spring		
CHEM 1225G or GEOL 1110G	General Chemistry II Lecture and Laboratory for STEM Majors or Physical Geology	4
DRFT 109	Computer Drafting Fundamentals	3
ENGR 111	Mathematics for Engineering Applications	3
MATH 1521G	Calculus and Analytic Geometry II	4
Select one course from Area IV: Social/Behavioral Sciences ²		
Credits		17
Second Year		
Fall		
ECON 2110G	Macroeconomic Principles	3
ENGL 2210G	Professional and Technical Communication Honors	3
PHYS 1310G & PHYS 1310L	Calculus -Based Physics I and Calculus -Based Physics I Lab	4
Select one course from Area V: Humanities ²		
Select one (not already chosen) from the following:		
C E 233	Mechanics-Statics	3-4
CHEM 1225G	General Chemistry II Lecture and Laboratory for STEM Majors	
GEOL 1110G	Physical Geology	
MATH 2530G	Calculus III	

PHYS 1320G & PHYS 1320L	Calculus -Based Physics II and Calculus -Based Physics II Lab	
Credits		16
Spring		
COMM 1115G	Introduction to Communication	3
Select one course from Area VI: Creative/Fine Arts ²		3
Elective Course ³		3
Select one (not already chosen) from the following:		3-4
C E 233	Mechanics-Statics	
CHEM 1225G	General Chemistry II Lecture and Laboratory for STEM Majors	
GEOL 1110G	Physical Geology	
MATH 2530G	Calculus III	
PHYS 1320G & PHYS 1320L	Calculus -Based Physics II and Calculus -Based Physics II Lab	
Credits		12
Total Credits		60

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