

Pre-Engineering AS (Mechanical/Aerospace Concentration)

The Pre-Engineering degree provides the first two years of study for a student who plans to transfer to UNM-Albuquerque or another 4-year institution to pursue a bachelor's degree in Engineering. A degree in Pre-Engineering provides a foundation for further study in Chemical, Biological, Environmental, Material, Civil, Nuclear, Electrical, Computer, Mechanical, Aerospace, or Construction Engineering. The degree emphasizes a firm foundation in mathematics and science, with selections of engineering courses tailored to future, more specific fields of engineering.

Season	Course	Credits
Fall 	ENGL 1110: Composition I	3
	Gen Ed Arts and Design: Choose a course	3
	MATH 1215: Intermediate Algebra	3
	Gen Ed Student Choice: Choose the recommended course: <ul style="list-style-type: none"> CS 105L: Introduction to Computer Programming 	3
Spring 	ENGL 1120: Composition II	3
	MATH 1220: College Algebra	3
	ENG 195: Topics: Introduction to Engineering	3
	Gen Ed Social and Behavioral Sciences: Choose a course	3
Summer 	MATH 1240: Pre-Calculus	3
	MATH 1230: Trigonometry	3
Fall 	MATH 1512: Calculus I	4
	PHYS 1310: Physics I and PHYS 1310L: Lab	4
	Gen Ed Humanities: Choose a course	3
Spring 	MATH 1522: Calculus II	4
	ENGL 2210: Professional and Technical Communication	3
	Gen Ed Second Language: Choose a course	3
	PHYS 1320: Physics II and PHYS 1320L: Lab	4
Fall 	MATH 2531: Calculus III	4
	ENG 130L: Introduction to Engineering Computing	3
	CHEM 1215: General Chemistry I and CHEM1215L: Lab	4
Total Program Credit Hours = 3 prerequisite credits + 63 credit hours		



Career and Educational Advancement Opportunities

This degree program prepares students with the math and science foundation to continue their studies toward a bachelor’s degree in a variety of engineering fields such as chemical, nuclear, civil, construction, mechanical, electrical, or computer engineering. Most full engineering jobs require a bachelor’s or master’s degree. Technician jobs may be available to those on the associate’s degree level. Internships are an important part of engineering education and all engineering internships are paid.

