

ALLIED FIELDS

Basic admission to the Mechanical Engineering requires that students have a Bachelors of Science degree in mechanical engineering, or from an allied field, acquired from an accredited program. A list of examples of allied fields is outlined below (not all-inclusive; contact a Graduate Advisor or the Director of Graduate Studies to discuss your situation).

Engineering Majors	Mining and Earth Sciences Majors	Science & Math Majors
Bioengineering/Biomedical/ Biological Engineering	Atmospheric Sciences	Biology/Microbiology/Genetics
Chemical/Petroleum Engineering	Geological Engineering	Chemistry/Biochemistry
Civil/Structural/Architectural/ Construction Engineering	Geoscience	Mathematics/Applied Math/Statistics
Electrical/Computer/Electronic/ Mechatronics/Robotics Engineering	Metallurgical Engineering	Physics/Applied Physics/Engineering Physics
Material Science & Engineering	Mining/Mineral Engineering	Astronomy/Space Science
Mechanical/Manufacturing/ Automotive Engineering		Physiology/Kinesiology
Aerospace/Aeronautical/ Astronautical Engineering		Environmental Science
Environmental/Nuclear Engineering		
Industrial/Systems Engineering		
General Engineering		
Engineering Technology (likely requires many of the courses from the next page before beginning an MS or PhD degree due to not being Calculus-based)		
Software Engineering/Computer Science		

MASTERY OF BASIC MECHANICAL ENGINEERING SKILLS AND PRINCIPLES

Graduate classes assume mastery of basic mechanical engineering skills and principles. No remedial assistance is provided at the graduate level. Students concerned about their preparation should take some or all of the corresponding U of U classes listed below (see the Director of Graduate Studies for guidance on which classes would be appropriate/necessary).

SUBJECT	APPROPRIATE UNIVERSITY OF UTAH COURSES
Mathematics through Partial Differential Equations	Math 1210, 1220, 2210, 2250, and 3150
Calculus-Based Physics	Physics 2210 and 2220
General Chemistry	Chemistry 1210
Computer Programming	CS 1400 (intro) or CS 1420 (accelerated) or ME EN 1010 (intro)
Electrical Engineering	ECE 2210
Manufacturing	ME EN 2650
Solid Mechanics (Statics, Dynamics, Mechanics/Strength of Materials, respectively)	ME EN 2010, 2030, and 3300 or 3310 and 3315
Thermodynamics	ME EN 2300 or 3600 or 3610
Fluid Mechanics	ME EN 3700 or 3710
Heat Transfer	ME EN 3650 or 4610
Design of Mechanical Elements	ME EN 3000
Mechatronics	ME EN 3230

For questions regarding registering for undergraduate courses, please contact the Undergraduate Advising Office. <https://www.mech.utah.edu/academics/undergraduate/undergraduate-advising/>