

# Program In Development: Engineering

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Union University plans to offer engineering courses beginning Fall, 2001 to prepare graduates for the practice of engineering at the professional level and lead to Union's first degree in engineering, which should be conferred in 2005 or 2006. Union plans to offer the Bachelor of Science in Engineering, B.S.E., with specializations in the electrical, industrial, and mechanical areas. The University plans to apply for accreditation with ABET (the Accrediting Board for Engineering and Technology) as soon as possible, which is generally in the fifth year of operation of an engineering program. The University is currently recruiting faculty for this program.

Students may begin their preparation for engineering by enrolling in required prerequisites in the fall of 2000, thus assuring them an adequate foundation for engineering. The first year of study emphasizes courses that are basic to any engineering degree. Union provides students with a strong background in the physical sciences and mathematics, (physics, calculus, chemistry, differential equations), as well as the fundamental humanities and social studies areas. Incoming students are expected to have completed the necessary requirements that will allow them to begin mathematics at the level of calculus. Ideally, engineering students will have been introduced to calculus in high school. All courses in the program are designed to fully prepare the student for a successful engineering career.

## Mission Statement

The Engineering Program will not only prepare students with a sound technical base that will make state licensure achievable but also educate them with a distinctive liberal arts orientation and with a view towards integration of faith and learning. An education in engineering at Union University aims to produce a socially and morally responsible citizen who is uniquely prepared to carry out public and global service opportunities as an individual committed to his/her faith and community.

## Course Offerings in Engineering (EGR)

()—Hours Credit; F—Fall; W—Winter; S—Spring; Su—Summer

**101. I . . . . E . . . . (3) F**

An overview of engineering as a profession.

**105. E . . . . G . . . . (3) S**

Technical sketching; geometrics construction with emphasis on plane surface analysis; presentation of engineering data; graphical solution to 3-dimensional space problems; primary and secondary auxiliary views. Application of Computer-Aided Design and Drafting (CADD).

## Typical Year 1: Engineering

Fall		Hours	Spring		
ENG 111	Written Composition I	3	ENG 112	Written Composition II	3
MAT 211	Calculus I	4	MAT 212	Calculus II	4
PHY 231*	General Physics I	5	PHY 232*	General Physics II	5
CSC 115	Computer Science I	3	ECF 212	Microeconomics	3
EGR 101	Intro. Engineering	3	EGR 105	Engineering Graphics	3
CLU 111	College Life at Union I	1	CLU 112	College Life at Union II	1
Winter					
COM 112	Public Communication	3			
HIS 101	World Civilization I	3			

\* Those not introduced to Calculus in high school should take CHE 111 Fall and BIO 100 Spring during the 1st year of study and reserve PHY 231-2 for the 2nd year.