

**UNDERGRADUATE DEGREE REQUIREMENTS**

The Bachelor of Science in Mechanical Engineering degree will be awarded to students who meet the following requirements:

1. Meet all general degree requirements of the University.
2. Attain a grade of "C" or better in each mathematics, science and computers course listed below (except chemistry), in each mechanical engineering core course listed below, in each Gordon Rule course, and in each of the departmentally approved technical electives listed below.
3. Satisfy the following specific degree requirements, which total 128 credits.

<b>Subjects</b>	<b>Course No.</b>	<b>Credits</b>
<b>GENERAL EDUCATION:</b>		
English Composition		6
Humanities *		9
Social Sciences *		9
<b>MATHEMATICS, SCIENCE AND COMPUTERS:</b>		
Mathematics (through calculus)		12
General Physics with Calculus (including lab)		8
Chemistry (including lab)		4
Engineering Mathematics I or equivalent	MAP 3305	3
Probability and Statistics for Engineers	STA 4032	3
Computer Programming**		3
Computer Applications in Mechanical Engineering II	EML 4534	3
Engineering Graphics	EGS 1111C	3
<b>MECHANICAL ENGINEERING CORE:</b>		
Fundamentals of Engineering	EGN 1002	3
Statics	EGM 3510	3
Dynamics	EGM 3400	3
Strength of Materials	EGM 3524	3
Engineering Materials I	EGM 3521	3
Thermodynamics I	EML 3100	3
Fluid Mechanics	EML 3701	3
Experimental Methodology	EML 3523C	3

Electro-Mechanical Devices	EGM 4045	3
System Dynamics	EML 4380	3
Heat Transfer	EML 4142	3
Applied Thermal Fluid Engineering	EML 4127	3
Machine Design I	EML 4500	3
Machine Design II	EML 4262	3
Engineering Design	EML 4521C	3
Design Project	EML 4551	3
Mechanical Engineering Laboratory	EML 4730L	3

ELECTIVES: 14

14 credits (minimum) of departmentally approved technical electives.

Directed Independent Study may be used as credit toward one technical elective in the student's program with approval of the faculty advisor and the department chair. Only in special cases of follow-up projects with the same faculty advisor, specifically approved by the department chair, will DIS be allowed as credit for a second technical elective.

\* Four-year students must meet specific course requirements as outlined in the Baccalaureate Degree Requirements subsection of the catalog. Transfer students may substitute a speech course for one humanities course and a health course for one social science course.

\*\* Four-year students are to take EML 2538 Computer Applications in Mechanical Engineering I offered by the Department of Mechanical Engineering.

10/09