### Minor

# **Engineering Management Minor**

## Opportunities for Employment and Graduate Studies

According to a recent Income and Salary Survey by the National Society of Professional Engineers, the median annual income of engineers having executive/administrative job functions is approximately \$20,000 higher than those having technical functions. This program provides undergraduate students with a set of courses that provides some of the basic management concepts useful to those aspiring to an executive/administrative management position in technology-based, project-oriented organizations. Upon graduation, this knowledge will help individuals qualify for project management positions or for entrepreneurial activities. Students interested in obtaining a strong preparation in engineering management should consider this minor

#### **Points of Interest**

The minor in engineering management is intended for students with majors in engineering, engineering technology, computer science, physics, chemistry, mathematics, ocean, earth and atmospheric sciences, or biology. Students with majors in other disciplines may also pursue this minor, and they are encouraged to talk with their advisors to determine its appropriateness to their educational objectives. The minor develops the skills in team building, interpersonal communications, decision making, ethics and leadership, project management, risk analysis, and quality assurance that employers are increasingly looking for in both engineers and scientists, as well as in other employees in "high tech" organizations. The minor also satisfies the University's General Education upper-division requirement.

For additional information about the undergraduate minor in engineering management, contact:

Chair

Department of Engineering Management and Systems Engineering Old Dominion University Norfolk, VA 23529-0248

Telephone: (757) 683-4558 FAX: (757) 683-5640

#### Requirements

Applicants for the minor in engineering management must be juniors or seniors with a declared major and a minimum GPA of 2.00. The courses can also be taken by graduate students or other graduates. The minor requires completion of 12 credit hours of course work with a minimum grade point average of 2.00 in all courses specified as a requirement for the minor exclusive of lower-level courses and prerequisite courses. A minimum of six hours in upper-level courses in the minor requirement must be taken through courses offered by Old Dominion University.

#### Curriculum

The course work for the minor in engineering management involves extensive writing assignments, oral presentations, and group projects, and is designed to develop the skills needed for rapid advancement in either industrial or government organizations. Twelve credit hours of course work is required to meet the requirements for the minor in engineering management. Students are required to complete three core engineering management classes and one engineering management elective. Any ENMA 300- or 400-level class is accepted as an elective for the minor, with the exception of internship or co-op courses. Students who intend to complete a master's in engineering management or in systems engineering should take ENMA 420 as part of their minor requirements as it is a prerequisite to the graduate programs.

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Engineering Management Minor

Select three of the following:		
ENMA 301	Introduction to Engineering Management	
ENMA 302	Engineering Economics	
ENMA 401	Project Management	
ENMA 421	Decision Techniques in Engineering	
ENMA 424	Risk Analysis in Engineering Management	
Engineering Management elective *		
Total Credit Hours		

Excluding internship and co-op courses