ENGINEERING PROJECT MANAGEMENT - MINOR

The Engineering Project Management minor is intended to help meet the requirements of industry by educating undergraduate engineering students to understand complex engineering projects, project organizations, and project management methods. Students completing this minor will be able to work effectively in multidisciplinary engineering projects immediately after completion and to advance more rapidly within the project management organization and profession. The management of projects entails technical knowledge, engineering skills, and management skills.

To earn the minor, a student must complete a total of 16 semester credit hours that include prerequisite introductory core courses (ENGR 333 and ENGR 380) and courses selected from the following 4 categories:

1. Business management and leadership. The courses listed under this category provide required skills to understand the key management principles and provide leadership in project planning and execution.
2. Project economics, analysis, and decisions. The courses listed under this category provide advanced understanding of the analytical tools required to support project planning and execution.
3. Application of project management tools. The courses listed under this category provide examples of the application of project management principles.
4. Project experience as directed studies. The courses listed under this category provide practical experience in managing projects via internships, campus or community-based engagements, or research. Students should be able to receive credit via ENGR 485 for documenting their project experience.

Program Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Semester Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 333</td>
<td>Project Management for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 380</td>
<td>Seminar Series in Engineering Project Management</td>
<td>1</td>
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</tbody>
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Business Management and Leadership

Select from the following: 2-4

- ENGR 251 Creating a Self-Aware Leader
- ENGR 350 Leading for Impact in Engineering, Business and Society
- ENGR 351 The Role of Engineering and Business in Society
- ENGR 450 Finding Your Leadership Qualities
- ENGR 451 Leading for a Lifetime: Continual Learning and Influence
- ESET 319 Engineering Leadership
- MGMT 309 Survey of Management
- SOMS 380 Workshop in Leadership Education
- SOMS 381 Workshop in Leadership Education II
- SOMS 481 Seminar in Executive Leadership
- SOMS 482 Seminar in Executive Leadership II

Project Economics, Analysis and Decisions

Select from the following: 2-6

- CHEN 430/ SENG 430 Risk Analysis in Safety Engineering
- CVEN 322 Civil Engineering Systems
- ISEN 210 Fundamentals of Industrial Engineering Design
- ISEN 302 Economic Analysis of Engineering Projects
- PETE 353 Petroleum Project Evaluation

Application of Project Management Tools

- CSCE 315 Programming Studio
- CSCE 431 Software Engineering

Select from the following: 3-6

- BMEN 469 Entrepreneurial Pathways in Medical Devices
- CHEN 460/ SENG 460 Quantitative Risk Analysis in Safety Engineering
- ISEN 330 Human Systems Interaction
- ISEN 442 Organizational Systems
- SENG 312 System Safety Engineering

Project Experience as Directed Studies

Select from the following: 0-3

- ENGR 485 Directed Studies (Internship Project, Campus Project or Community Project)
- ENGR 491 Research (Research Project)

Total Semester Credit Hours: 16

Minimum required GPA to declare minor is a 2.5.
Must earn a grade of ‘C’ or better in each course used towards minor.
Must achieve an overall GPA of 2.5 in approved minor coursework.