49. Special Consideration

Dwight Look College of Engineering
Minor in Engineering Project Management
Request for a new minor
SPECIAL CONSIDERATION
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Dwight Look College of Engineering
Minor in Engineering Project Management
Request for a New Minor
Texas A&M University
Proposed Minor Field of Study

Name of Minor Program: Engineering Project Management

Department: Dwight Look College of Engineering

College: Dwight Look College of Engineering

Will grant a minor [ ] Yes [ ] No Academic Year: 2016-2017

A selection from among the following courses will constitute a minor field of study.

A. The following 4 hours of course work are required.
   ENGR 333 - Project Management for Engineers
   ENGR 380 - Seminar Series in Engineering Project Management

B. Select 12 hours from the following courses.
   See Appendix A for course listings

Please indicate further requirements such as grade point requirement, prerequisites, resident (if above the minimum 6 hours at the 300- to 400-level), capstone or methods courses.

Minimum of 16 hours required.

Minimum of 6 hours at 300- to 400-level

(1) Minimum required GPA to declare minor is 2.5, (2) Obtain a "C" or better in each course taken towards minor, (3) Achieve an overall GPA of 2.5 in approved minor coursework, and

(3) ENGR 333 must be taken junior year.

Reviewed and approved by:

Department Head/Program Director Date AOC Dean of College Date
Appendix A – Engineering Project Management Minor

To earn a minor in Engineering Project Management, a student must complete a total of 16 credit hours that includes the prerequisite introductory project management courses (ENGR 333 – Engineering Project Management (3 hours) and ENGR 380 – Seminar Series in Engineering Project Management (1 hour)) as well as 12 credit hours in courses selected from the following 4 categories:

1. Courses providing background in 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. Courses providing background in 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. Courses providing the application of project management tools within the major. The courses listed under this category provide examples of the application project management principles within the students’ area of study.
4. Courses providing project experiences 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 received credits via ENGR485 for documenting their project experience.

Table A1 shows the course requirements for each of the listed categories. However, this list is to be re-evaluated periodically to include newly developed courses relevant to engineering project management.
<table>
<thead>
<tr>
<th>Courses providing background in business management and leadership (must take minimum 2 credit hours; maximum of 4 credit hours will count towards the minor)</th>
<th>Courses providing background in project economics, analysis, and decisions (must take minimum 2 credit hours; maximum 6 credit hours will count towards the minor)</th>
<th>Course providing the application of project management tools within the major (must take minimum 3 credit hours; maximum of 6 credit hours will count towards the minor)</th>
<th>Course providing project experiences as directed studies (maximum of 3 credit hours will count toward the minor)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR333 Project Management for Engineers (3)</td>
<td>MGMT309 Survey of Management (3)</td>
<td>ISEN302/303 Economic Analysis of Engineering Projects/Engineering Economic Analysis (2/3)</td>
<td>ISEN411 Engineering Management Techniques (3)</td>
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<tr>
<td>EnGR380 Seminar in Project Management (1)</td>
<td>SOMS380 Workshop in Leadership Education (1)</td>
<td>CVEN322 Civil Engineering Systems (3)</td>
<td>CVEN405 Construction Management of Field Operations (3)</td>
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<tr>
<td>SOMS381 Workshop in Leadership Education II (1)</td>
<td>PETE353 Petroleum Project Evaluation (3)</td>
<td>CVEN473 Engineering Project Estimating and Planning (3)</td>
<td>ENGR491 Research (Research project e.g. Aggie-E-Challenge)</td>
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<tr>
<td>SOMS481 Seminar in Executive Leadership (1)</td>
<td>CHEN/SENG430 Risk Analysis in Safety Engineering (3)</td>
<td>CVEN349 Civil Engineering Project Management (3)</td>
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<tr>
<td>SOMS482 Seminar in Executive Leadership II (1)</td>
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<td>ISEN430 Human Factors and Ergonomics (3)</td>
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<tr>
<td>ESET 151</td>
<td>CSCE431 Software Engineering (3)</td>
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<tr>
<td>Engineering Leadership (3)</td>
<td>ENGR 289 Introduction to Engineering Leadership (2-2)</td>
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<td>CSCE315 Programming Studio (3)</td>
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<tr>
<td>ENGR 489A Leadership and Business Fundamentals (2-2)</td>
<td>SENG312 Systems Safety Engineering (3)</td>
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<tr>
<td>CHEN/SENG460 Quantitative Risk Analysis in Safety Engineering (3)</td>
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<tr>
<td>ENGR 489B Role of Engineering and Business in Society (2-2)</td>
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<td>ESET 329 Six Sigma and Applied Statistics (4)</td>
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<tr>
<td>ENGR 489A Exploring Your Leadership Qualities and Perspective (2-2)</td>
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<td>ESET 419 Engineering Technology Capstone I (3)</td>
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<td>ENGR 489B Leadership Capstone (2-2)</td>
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<tr>
<td>BMEN469 Entrepreneurship in BMEN (3)</td>
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<td>MEEN489 Entrepreneurship related to Nanomaterials Application in Energy (3)</td>
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</tbody>
</table>

Note: Highlighted in red are the courses that are not on the Catalog.

Table A2 presents an example of course the students from different department can take to satisfy the Engineering Project Management minor degree requirements.
<table>
<thead>
<tr>
<th>Example</th>
<th>Courses introducing core project management principles (must take 4 credit hours)</th>
<th>Courses providing background in business management and leadership (must take minimum 2 credit hours; maximum of 4 credit hours will count towards the minor)</th>
<th>Courses providing background in project economics, analysis, and decisions (must take minimum 2 credit hours; maximum 6 credit hours will count towards the minor)</th>
<th>Course providing the application of project management tools within the major (must take minimum 3 credit hours; maximum of 6 credit hours will count towards the minor)</th>
<th>Course providing project experiences as directed studies (maximum of 3 credit hours will count toward the minor)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEEN student</td>
<td>ENGR333 and ENGR380 4 credit hours</td>
<td>MGMT309 3 credit hours</td>
<td>ISEN302 and CHEN/SENG430 5 credit hours</td>
<td>MEEN489 3 credit hour</td>
<td>ENGR485 1 credit hour</td>
</tr>
<tr>
<td>ISEN student</td>
<td>ENGR333 and ENGR380 4 credit hours</td>
<td>MGMT309 3 credit hours</td>
<td>ISEN303 3 credit hours</td>
<td>ISEN411 and ISEN430 6 credit hours</td>
<td></td>
</tr>
<tr>
<td>CVEN student</td>
<td>ENGR333 and ENGR380 4 credit hours</td>
<td>SOMS380 and SOMS381 2 credit hours</td>
<td>CVEN322 3 credit hours</td>
<td>CVEN405 and CVEN473 6 credit hours</td>
<td>ENGR485 1 credit hours</td>
</tr>
<tr>
<td>CSCE student</td>
<td>ENGR333 and ENGR380 4 credit hours</td>
<td>ENTC151 3 credit hours</td>
<td>ISEN302 2 credit hours</td>
<td>CSCE431 and CSCE315 6 credit hours</td>
<td>ENGR485 1 credit hours</td>
</tr>
</tbody>
</table>
MEMORANDUM

TO: Dr. Anthony Guiseppi-Elie
Department of Biomedical Engineering

THROUGH: Dr. Valerie Taylor, Senior Associate Dean for Academic Affairs
Dwight Look College of Engineering

FROM: Dr. Ivan Damnjanovic, Associate Professor and Coordinator
Engineering Project Management

SUBJECT: New Minor in Engineering Project Management

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.

The Dwight Look College of Engineering requests support from the Department of Biomedical Engineering to include the following course in the selection of minor coursework as outlined in the attached document:

- BMEN 469 – Entrepreneurial Issues in Biomedical Engineering

Thank you for your willingness to support this new minor in the Dwight Look College of Engineering.
September 10, 2015

MEMORANDUM

TO: Dr. M. Nazmul Karim
Artie McFerrin Department of Chemical Engineering

THROUGH: Dr. Valerie Taylor, Senior Associate Dean for Academic Affairs
Dwight Look College of Engineering

FROM: Dr. Ivan Damnjanovic, Associate Professor and Coordinator
Engineering Project Management

SUBJECT: New Minor in Engineering Project Management

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The Dwight Look College of Engineering requests support from the Artie McFerrin Department of Chemical Engineering to include the following course in the selection of minor coursework as outlined in the attached document:

- CHEN/SENG 430 – Risk Analysis in Safety Engineering
- CHEN/SENG 460 – Quantitative Risk Analysis
- SENG 312 – Systems Safety Engineering

Thank you for your willingness to support this new minor in the Dwight Look College of Engineering.
September 10, 2015

MEMORANDUM

TO: Dr. Robin Autenrieth, Head
Zachry Department of Civil Engineering

THROUGH: Dr. Valerie Taylor, Senior Associate Dean for Academic Affairs
Dwight Look College of Engineering

FROM: Dr. Ivan Damnjanovic, Associate Professor and Coordinator
Engineering Project Management

SUBJECT: New Minor in Engineering Project Management

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The Dwight Look College of Engineering requests support from the Zachry Department of Civil Engineering to include the following courses in the selection of minor coursework as outlined in the attached document:

- CVEN 322 – Civil Engineering Systems
- CVEN 349 – Civil Engineering Project Management
- CVEN 405 – Construction Management of Field Operations
- CVEN 473 – Engineering Project Estimation and Planning

Thank you for your willingness to support this new minor in the Dwight Look College of Engineering.
MEMORANDUM

TO: Dr. Dilma Da Silva, Head
Department of Computer Science and Engineering

THROUGH: Dr. Valerie Taylor, Senior Associate Dean for Academic Affairs
Dwight Look College of Engineering

FROM: Dr. Ivan Damnjanovic, Associate Professor and Coordinator
Engineering Project Management

SUBJECT: New Minor in Engineering Project Management

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The Dwight Look College of Engineering requests support from the Department of Computer Science and Engineering to include the following courses in the selection of minor coursework as outlined in the attached document:

- CSCE 431 – Software Engineering
- CSCE 315 – Programming Studio (3)

Thank you for your willingness to support this new minor in the Dwight Look College of Engineering.
September 10, 2015

MEMORANDUM

TO:        Dr. Reza Langari, Head
            Department of Engineering Technology and Industrial Distribution

THROUGH:   Dr. Valerie Taylor, Senior Associate Dean for Academic Affairs
            Dwight Look College of Engineering

FROM:      Dr. Ivan Damnjanovic, Associate Professor and Coordinator
            Engineering Project Management

SUBJECT:   New Minor in Engineering Project Management

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The Dwight Look College of Engineering requests support from the Department of Engineering Technology and Industrial Distribution to include the following courses in the selection of minor coursework as outlined in the attached document:

- ESET 151 – Engineering Leadership
- ESET 329 – Six Sigma and Applied Statistics
- ESET 419 – Engineering Technology Capstone I

Thank you for your willingness to support this new minor in the Dwight Look College of Engineering.
September 10, 2015

MEMORANDUM

TO: Dr. Cesar Malave, Head
Department of Industrial and Systems Engineering

THROUGH: Dr. Valerie Taylor, Senior Associate Dean for Academic Affairs
Dwight Look College of Engineering

FROM: Dr. Ivan Damnjanovic, Associate Professor and Coordinator
Engineering Project Management

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The Dwight Look College of Engineering requests support from the Department of Industrial and Systems Engineering to include the following courses in the selection of minor coursework as outlined in the attached document:

- ISEN 302 – Economic Analysis of Engineering Projects
- ISEN 303 – Engineering Economic Analysis
- ISEN 411 – Engineering Management Techniques
- ISEN 430 – Human Factors and Ergonomics

Thank you for your willingness to support this new minor in the Dwight Look College of Engineering.
September 10, 2015

MEMORANDUM

TO: Dr. Wendy R. Boswell, Head
Department of Management, Mays Business School

THROUGH: Dr. Valerie Taylor, Senior Associate Dean for Academic Affairs
Dwight Look College of Engineering

FROM: Dr. Ivan Damnjanovic, Associate Professor and Coordinator
Engineering Project Management

SUBJECT: New Minor in Engineering Project Management

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The Dwight Look College of Engineering requests support from the Department of Management in the Mays Business School to include the following course in the selection of minor coursework as outlined in the attached document:

- MGMT 309 – Survey of Management

Thank you for your willingness to support this new minor in the Dwight Look College of Engineering.
MEMORANDUM

TO: Dr. A. Daniel Hill  
Harold Vance Department of Petroleum Engineering

THROUGH: Dr. Valerie Taylor, Senior Associate Dean for Academic Affairs  
Dwight Look College of Engineering

FROM: Dr. Ivan Damnjanovic, Associate Professor and Coordinator  
Engineering Project Management

SUBJECT: New Minor in Engineering Project Management

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The Dwight Look College of Engineering requests support from the Harold Vance Department of Petroleum Engineering to include the following course in the selection of minor coursework as outlined in the attached document:

- PETE 353 – Petroleum Project Evaluation

Thank you for your willingness to support this new minor in the Dwight Look College of Engineering.
MEMORANDUM

TO: Dr. Richard Cummins, Director
    Hollingsworth Leadership Program
    Texas A&M University Corps of Cadets, School of Military Science

THROUGH: Dr. Valerie Taylor, Senior Associate Dean for Academic Affairs
         Dwight Look College of Engineering

FROM: Dr. Ivan Damnjanovic, Associate Professor and Coordinator
      Engineering Project Management

SUBJECT: New Minor in Engineering Project Management

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The Dwight Look College of Engineering requests support from the School of Military Science to include the following courses in the selection of minor coursework as outlined in the attached document:

- 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

Thank you for your willingness to support this new minor in the Dwight Look College of Engineering.