

# ENM 397P – Projects in Engineering Management

## Spring 2017

Engineering Management students will be completing Projects in Engineering Management (ENM 397P) twice – once during each summer of the two-year program. These two projects are typically on the same or related topics, and the second report builds on the first. The topic must involve the application of the Engineering Management curriculum content to your professional or work responsibilities. Even though the two projects are typically on a related topic, each session of ENM 397P is a standalone course that requires research, a presentation and a written report, and each course receives a letter grade.

Towards the end of the semester, all students enrolled in the Projects in Engineering Management course gather to present their projects on presentation days. For summer semesters, students completing Project A are required to attend all four days of presentations and students completing Project B are required to attend the last two days of presentations. For the spring and fall semesters, presentations are typically held over one day, which all students enrolled will be required to attend. Attendance for presentations is mandatory and students must attend on-site, there will not be a remote option.

### CHOOSING A TOPIC

Your project should be built on and enhance your understanding of the material you have studied in your coursework. Projects are typically based on a literature survey and a synthesis of that research on a particular topic, and then the research is combined with your own professional experiences to produce actionable management recommendations for your employer. For the project to be a positive experience for the student, there are two important criteria: 1) the topic has to be something that is truly of interest to you, and 2) there should be a substantial body of high quality academic research available.

### SUPERVISOR

Identify a faculty member who is interested in the topic and is willing to work with you. Your faculty supervisor should be an Engineering Management program instructor. If you are unable to find a supervisor, the program director can help you identify a suitable faculty member. You are also strongly encouraged to select a corporate (work) supervisor, preferably your supervisor or someone at a similar level within your company. Projects should be related to your organization's business, and the project for the second summer project should flow from the first summer project.

### COMMUNICATION

The supervisor and the student should determine the best method for communicating on the project during the summer since there is no scheduled classroom time.

### PROJECT SUBMISSION

The approximate length of the project is 25 pages, depending upon supervisor's direction.

Your project should demonstrate the depth of your understanding of the central issue and ancillary issues of the project, and should identify how you have been able to apply your engineering management skills.

A student's report structure will vary depending upon the supervisor. It is the student's responsibility to work with the supervisor to determine a mutually agreed upon report structure as well as the length of the report. A typical report outline is below:

- Title Page
- Abstract or Executive Summary – in one page or less, describe the major objectives, research findings, and recommendations of your study. Ideally, your supervisor should be able to read this and understand the main points of your paper (but not all of the interesting details).
- Introduction – set the stage for your research. What is your research question or objective? Describe the background of the company you researched, or illustrate your topic with a scenario, an example, or compelling statistics. At the end of the introduction, the reader should be convinced that your research question/topic is important, and that your study investigates something that employees, managers, and/or researchers would find useful. Your introduction should also describe how the remainder of your report is structured.
- Body – describe what you studied, how you studied it, and what you found out. Make sure you describe any theory that is relevant to your topic or your research methodology. Typically, the body is divided into several major sections or chapters. Each section should have an introductory paragraph and a concluding paragraph. The conclusion summarizes the chapter and provides a lead-in to the following chapter. At a minimum, the body of your report would describe:
  - The topic/problem you studies (and why it is important)
  - Your research methodology (how you went about studying this topic)
  - How you analyzed your research
  - A summary of your findings
- Conclusions – summarize the main points of your research and findings. Based on your research, what are your recommendations for organizations? (This could be specific to one organization or to organizations in general, depending on your study.) Are your recommendations generalizable to other organizations or other types of organizations? Are there important limitations to your research?
- Appendices – include any interview forms, survey questions, statistical analyses, or other details of your research or findings here.

## PRESENTATION

All students should be prepared to present a 10-minute synopsis of their report with visuals (PowerPoint, etc.). Each presentation will be followed by a 10 minute Q&A where other students, faculty, and visitors may inquire about specifics of the report/presentation. A faculty member will be available to monitor the Q&A time, provide brief feedback on the presentation and contribute information to the project supervisor regarding the project grade.

## GRADING

A letter grade for the course will be given based upon the quality of the project.

## ATTENDANCE

All students are required to attend presentations to be held on April 26<sup>th</sup>. In-person attendance is mandatory; there is no remote option for attendance.

## DEADLINES

*Prior to January 26*

Obtain faculty supervisor and determine topic (in cooperation with supervisor and advisor)  
Report supervisor and topic to Graduate Program Coordinator

*April 14 (SPRING 2017 GRADUATES ONLY)*

Last day to apply to graduate

Complete online Master's Graduation Application form:

[https://utdirect.utexas.edu/ogs/forms/candidacy/stu\\_appsList.WBX](https://utdirect.utexas.edu/ogs/forms/candidacy/stu_appsList.WBX)

*April 12*

Written draft due to supervisor

*April 26*

Presentation days – all students must attend in-person

*May 1*

Last day to submit written portion of project to supervisor

## MEETING DATES

*January 28*

Project Workshop

Attendance only required if you have not submitted project information to Graduate Program Coordinator

*April 26*

Presentation Days

## ENM FACULTY AND COURSES TAUGHT

Caroline Bartel, Managing People & Organizations; [caroline.bartel@mcombs.utexas.edu](mailto:caroline.bartel@mcombs.utexas.edu)

Eric Bickel, Strategic Decision & Risk Analysis; [ebickel@mail.utexas.edu](mailto:ebickel@mail.utexas.edu)

Rich Crawford, Creativity, Innovation & Product Development; [rhc@mail.utexas.edu](mailto:rhc@mail.utexas.edu)

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