*1. Course number and name*

**ENGR 272: Engineering Project Management**

*2. Credits, contact hours, and categorization of credits in Table 5-1 (math and basic science, engineering topic, and/or other).*   
1 credit; one 50-minute lecture per week; engineering topic

*3. Instructor’s or course coordinator’s name*

Chris W. Thomson

*4. Text book, title, author, and year*

Instructor’s slides and spreadsheets

*a. other supplemental materials*

* Selected excerpts from Project Management Institute (PMI) body-of-knowledge
* Selected excerpts from International Association for Advancement of Cost Engineering (AACE) body-of-knowledge
* GAO Schedule Assessment Guide: Best Practices for Project Schedules, December 2015, GAO-16-89G
* GAO Cost Estimating and Assessment Guide: Best Practices for Developing and Managing Program Costs, , March 2020, GAO-20-195G

*5. Specific course information*

*a. brief description of the content of the course (catalog description)*

An introduction to various concepts and tools associated with engineering project management.

*b. prerequisites or co-requisites*

Restricted to Engineering students with sophomore standing or above.

*c. indicate whether a required, elective, or selected elective (as per Table 5-1) course in the program*

Elective for Mechanical Engineering program.

*6. Specific goals for the course*

*a. specific outcomes of instruction (e.g. The student will be able to explain the significance of current research about a particular topic.)*

* The student will be able to utilize the Work Breakdown Structure Diagram (WBS Diagram) tool to manage project scope ;
* The student will be able utilize the precedence diagram tool to create and analyze Critical-Path Method (CPM) schedules;
* The student will demonstrate basic understanding and knowledge of activity-based cost estimating;
* The student will demonstrate basic understanding of PMI’s knowledge areas, process groups, and the project life cycle;
* The student will demonstrate basic understanding and knowledge of the historical development of Engineering Project Management as an engineering discipline;
* The student will demonstrate basic understanding and knowledge of the contractual relationships between internal stakeholders, and interactions with external project stakeholders.

*b. explicitly indicate which of the student outcomes listed in Criterion 3 or any other outcomes are addressed by the course.*

ABET student outcomes: 1, 3, 4, 5, 7

*7. Brief list of topics to be covered*

* 20th-century megaprojects that led to establishment of project management discipline
* Stakeholder and Contractual Relationships
* Project Scope Management
* Project Time Management
* Project Cost Management