

Course name	ECE 32600 Engineering Project Management
Credit and contact hours	(3 cr.) Class 3
Course coordinator's name	Brian King
Textbook	E. Larson, <i>Project Management</i> , 7 th Ed., McGraw-Hill, 2018, ISBN: 9781259666094 .
Course information	<p>ECE 32600 Engineering Project Management (3 cr.) P: Sophomore Standing. Class 3. Project management is an important skill that is needed in the private and public sectors as well as specialty businesses. This course explores the challenges facing today's project managers and provides a broad understanding of the project management environment focused on multiple aspects of the project.</p> <p>Prerequisites/ Co-Requisite P: Sophomore standing</p> <p>Required, Elective, or Selected Elective: EE Elective, CE Elective</p>
Goals for the course	<p>Upon successful completion of the course, students should be able to</p> <ol style="list-style-type: none"> 1. Understand the terminology used in engineering project management. [1,2,6] 2. Describe the linkage between projects and the strategic direction of the organization. [1,2,6] 3. Identify different types of project management structures, their relative strengths and weaknesses, and how they are impacted by organizational culture. [1,2,6] 4. Recognize the importance of a complete project scope statement acceptable to the customer as a condition for project success. [1,2,6] 5. Develop a work breakdown structure for a project and use the organizational breakdown structure to create work packages. [1,2,6] 6. Use industry available computer software to create project schedules and activity networks. [1,2,6] 7. Understand how to use the critical path to reduce project duration. [1,2,6] 8. Appreciate the relationships that need to be managed in order to be a successful project manager. [1,2,6] 9. Calculate and interpret different project performance indexes and understand how organizations track project performance. [1,2,6] 10. Recognize the environmental factors and cultural perspectives that influence international projects. [1,2,6]

	<ul style="list-style-type: none"> 11. Experience working in a project team to solve a case study problem and make a presentation of the case study using PowerPoint. [3,5] 12. Write a project report, adhering to the specified format for business reports using appropriate writing style, grammar, and spelling. [3] 13. Understand the processes used in industry to develop products and how this relates to project management. [1,2,6] 14. Develop a project plan for a conceptual project and make a project launch presentation intended for management. [1,2,3,5,6]
List of topics to be covered	<p>Based on two classes per week, fifteen weeks plus final exam</p> <ul style="list-style-type: none"> 1. Introduction (1 class) 2. Organization strategy and project selection (1 class) 3. Organizational culture (1 class) 4. Defining the project, estimating project times and cost, developing a plan (4 classes) 5. Managing risk (1 class) 6. Scheduling resources and costs and reducing project duration (3 classes) 7. Leadership, managing project teams, and outsourcing (4 classes) 8. Progress and performance measurement (2 classes) 9. Project audit and closure (1 class) 10. International projects (1 class) 11. Oversight (1 class) 12. Product Development Process (1 class) 13. Technology Development Process (3 classes) 14. Project presentations (2 classes) 15. Project Launch presentations (2 classes) 16. Exams (2 classes)
Syllabi approved by	Brian King
Date of approval	8/27/2021