

## Tech 496 Industrial Project Management

Student Learning Objectives and Outcomes	Corresponding Assessments:
<p><b>Students will be able to:</b></p> <p><b>1. Identify and describe major problems, issues, concerns, and solutions that relate to projects, project management, project teams, and project leaders:</b>            Identify problems, issues, concerns, and solutions (PICS) that:</p> <ol style="list-style-type: none"> <li>a. occur during projects</li> <li>b. relate to project management</li> <li>c. occur during team engagement on projects between team members and/or team leaders</li> <li>d. occur for team leaders of projects</li> <li>e. are specific to international projects</li> <li>f. occur during projects that are executed by a multi-cultural teams and involve ethnically diverse team members working together</li> <li>g. are specific to team leaders of international projects and/or multicultural teams executing projects</li> </ol>	Text Project Literature Study Paper Case Study Career Project Team Project
<p><b>2. Identify and describe best practices for managing projects and leading teams, including international projects and multi-cultural teams.</b></p>	Literature Study; Text Project Case Study; Paper, Team Project
<p><b>3. Perform effectively on a project team (hopefully multicultural team) to complete a technical project.</b></p> <ol style="list-style-type: none"> <li>a. To engage in the leadership of team members or work package groups</li> <li>b. To engage in conflict resolution to resolve team issues.</li> <li>c. To perform team and peer assessments throughout the project</li> <li>d. To execute a technical project</li> </ol>	Team Participation Assessment Team Assessment Professor's Assessment Team Project Outcomes
<p><b>4. Prepare the team for project work by</b></p> <ol style="list-style-type: none"> <li>a. developing a team operations manual</li> <li>b. developing a peer and team assessment system</li> <li>c. creating the team organization and process</li> <li>d. developing an individual project plan</li> <li>e. participating in the development of a team project plan</li> </ol>	Team Operating Manual Peer Assessment System Use of Peer Assessment System Team Plan
<p><b>5. Exhibit leadership and/or participation while engaged in a team community service project.</b></p> <ol style="list-style-type: none"> <li>a. plan</li> <li>b. initiate</li> <li>c. execute</li> <li>d. terminate</li> </ol>	Service Project Report & Evaluation
<p><b>6. Demonstrate effective project</b></p> <ol style="list-style-type: none"> <li>a. planning</li> <li>b. initiation</li> <li>c. execution</li> <li>d. evaluation</li> <li>e. termination</li> <li>f. problem solving</li> <li>g. leadership</li> </ol>	Individual Project Plan Individual Portfolio Peer Assessment Team Assessment Team Participation Assessment Project Feedback logs Team Project Plan Team Project portfolio, presentation, website
<p><b>7. Demonstrate effective use of project management techniques and tools in the management of a technical project.</b></p> <ol style="list-style-type: none"> <li>a. planning</li> <li>b. execution</li> <li>c. termination</li> <li>b. MS Project</li> <li>c. finance procedures</li> <li>d. procurement procedures</li> <li>e. scheduling</li> <li>f. MACE procedures and process</li> </ol>	Individual Project Plan MS Project Test Individual Portfolio Peer Assessment Team Assessment Team Plan Team presentation, portfolio, and website

<p><b>8. Integrate mathematics, the sciences, communication, management, technical and technological knowledge and skills to accomplish team and project objectives.</b></p> <ul style="list-style-type: none"> <li>a. design a vehicle to technical specifications</li> <li>b. build the vehicle to technical specifications</li> <li>c. solve technical problems associated with project design, construction, and evaluation</li> <li>d. test and evaluate the vehicle to technical specifications</li> </ul>	<p>Individual Project Research Individual Project Design Individual Portfolio</p>
<p><b>9. Design, develop, prepare, and deliver</b></p> <ul style="list-style-type: none"> <li>a. executive team presentation</li> <li>b. team portfolio</li> <li>c. team website</li> </ul>	<p>Team Presentation Team Portfolio Team Website</p>