ENGM 512 Project Management

Course Description

In this course, students develop a comprehensive understanding of project management principles and practices essential for organizational success. Through exploring the project management life cycle—initiation, planning, execution, monitoring, and closure—students will master tools, techniques, and methodologies applicable across industries. By engaging in practical exercises, case studies, and a team project, students will learn to manage scope, schedules, costs, quality, risks, and stakeholders effectively. By the end of the course, students will be equipped with the skills to lead projects professionally and align them with strategic organizational goals.

Course Learning Outcomes

1. Demonstrate critical understanding of management literature on methods of project development.
2. Develop the appropriate organizational structure, project approach and resource requirements for a specific project.
3. Use qualitative and quantitative methods to analyse project management methodologies and tools.
4. Using project management software and methodologies, critically evaluate data to create proposals to inform the management and scheduling of projects, or solutions to problems.
5. Operate at a professional level of interpersonal skills and cultural awareness to lead projects and collaborate effectively with others.

Learning Resources

- Project Management Institute (PMI). (2021). A Guide to the Project Management Body of Knowledge (PMBOK® Guide) (7th ed.).

Course Content

1. Introduction to Project Management and Project Environments
2. Project Selection and Initiation
3. Role of the Project Manager
4. Managing Project Scope
5. Managing Project Schedules
6. Managing Project Costs
7. Managing Project Quality
8. Managing Project Risks
9. Managing Project Communications and Stakeholders
10. Managing Project Resources and Procurement