



Course Outline (Higher Education)

School:	School of Engineering, Information Technology and Physical Sciences
Course Title:	ENGINEERING PROJECT MANAGEMENT THEORY
Course ID:	ENGIN5205
Credit Points:	15.00
Prerequisite(s):	Nil
Co-requisite(s):	Nil
Exclusion(s):	Nil
ASCED:	039999

Description of the Course :

This course adopts a holistic view of engineering project management theory, considering issues throughout a project life cycle. It considers the project responsibilities of engineering managers and organisations, from the definition phase of a project to its conclusion. The perspective of stakeholders, particularly the project manager, are considered. The emphasis is interdisciplinary and relevant to all fields of engineering practice.

Grade Scheme: Graded (HD, D, C, etc.)

Work Experience:

No work experience: Student is not undertaking work experience in industry.

Placement Component: No

Supplementary Assessment: Yes

Where supplementary assessment is available a student must have failed overall in the course but gained a final mark of 45 per cent or above and submitted all major assessment tasks..

Program Level:

Level of course in Program	AQF Level of Program					
	5	6	7	8	9	10
Introductory	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intermediate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✓	<input type="checkbox"/>
Advanced	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Learning Outcomes:**Knowledge:**

- K1.** Evaluate modern project management theory and demonstrate relevant practice techniques.
- K2.** Formulate the scope for a project that would be suitable to satisfy stakeholder needs.
- K3.** Discuss issues in project management practices with regard to building clients and stakeholders' requirements

Skills:

- S1.** Analyse the application of project management tools and techniques to meet complex contextual demands in different sectors.
- S2.** Evaluate, analyse and integrate professional approaches to managing projects within sector specialisations
- S3.** Reflect and participate constructively in the selection of consultants, contractors and resources.

Application of knowledge and skills:

- A1.** Recognition of the importance of choosing the most relevant management strategy.
- A2.** Analyse the utilisation of the latest management tools and techniques for effective and efficient implementation and completion of projects.
- A3.** Identify key issues in management systems and control with regard to quality management

Course Content:

Topics will include:

- Modern Project Management theory and practices
- Scope management
- Development of acquisition strategies
- Managing project teams
- Selection of consultant and contractors
- Progress and performance
- Communication processes
- Project measurement, evaluation, and closure

Values:

- V1.** Appreciate the best practices of effective management strategies for successful completion of projects.
- V2.** Recognise the importance of monitoring and evaluation of projects.

Graduate Attributes

The Federation University FedUni graduate attributes (GA) are entrenched in the Higher Education Graduate Attributes Policy (LT1228). FedUni graduates develop these graduate attributes through their engagement in explicit learning and teaching and assessment tasks that are embedded in all FedUni programs. Graduate attribute attainment typically follows an incremental development process mapped through program progression. **One or more graduate attributes must be evident in the specified learning outcomes and assessment for each FedUni course, and all attributes must be directly assessed in each program**

Graduate attribute and descriptor		Development and acquisition of GAs in the course			
		Learning Outcomes (KSA)	Code A. Direct B. Indirect N/A Not addressed	Assessment task (AT#)	Code A. Certain B. Likely C. Possible N/A Not likely
GA 1 Thinkers	Our graduates are curious, reflective and critical. Able to analyse the world in a way that generates valued insights, they are change makers seeking and creating new solutions.	K1, K2, K3, S1, S2, S3, A1, A2, A3	A	1, 2, 3	A
GA 2 Innovators	Our graduates have ideas and are able to realise their dreams. They think and act creatively to achieve and inspire positive change.	K2, S2, A3	A	1, 2, 3	A
GA 3 Citizens	Our graduates engage in socially and culturally appropriate ways to advance individual, community and global well-being. They are socially and environmentally aware, acting ethically, equitably and compassionately.	K1, K3, S3, A3	A	1, 2, 3	A
GA 4 Communicators	Our graduates create, exchange, impart and convey information, ideas, and concepts effectively. They are respectful, inclusive and empathetic towards their audience, and express thoughts, feelings and information in ways that help others to understand.	K1, S3, A1, A2, A3	A	3	A
GA 5 Leaders	Our graduates display and promote positive behaviours, and aspire to make a difference. They act with integrity, are receptive to alternatives and foster sustainable and resilient practices.	K1, S3, A1, A2, A3	A	1, 3	A

Learning Task and Assessment:

Learning Outcomes Assessed	Learning Tasks	Assessment Type	Weighting
K1-3, S1-3, A1-3	Problem based questions and design tasks pertinent to engineering projects.	Assignment	20 - 40%
K1-3, S1-3, A1-3	Development of a project management plan using Microsoft Project software	Computer simulation project	30 - 50%
K1-3, S1-3, A1-3	A combination of quantitative and qualitative problem solving, design calculations and critical analysis of time and communication management.	Assignment or project report(s).	20 - 40%

Adopted Reference Style:

Other (IEEE)