

# Course Outline (Higher Education)

|                         |   |
|-------------------------|---|
| <b>School:</b>          | School of Science, Engineering and Information Technology |
| <b>Course Title:</b>    | ENGINEERING PROJECT RESOURCE PLANNING                     |
| <b>Course ID:</b>       | ENGIN5209   |
| <b>Credit Points:</b>   | 15.00   |
| <b>Prerequisite(s):</b> | Nil   |
| <b>Co-requisite(s):</b> | Nil   |
| <b>Exclusion(s):</b>    | Nil   |
| <b>ASCED:</b>           | 039999  |

## Description of the Course :

This course provides students with the insights, knowledge and skills necessary for providing professional engineering input into resource and quality management programs in an business environment. It covers project governance, quality control and quality assurance and organisational planning. The best practices for resource management and staff acquisition will be explored.

**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:

| AQF Level of Program |                          |                          |                          |                          |                                     |                          |
|----------------------|--------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|--------------------------|
|                      | 5                        | 6                        | 7                        | 8                        | 9                                   | 10                       |
| Level                |                          |                          |                          |                          |                                     |                          |
| 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"/>            | <input type="checkbox"/> |
| Advanced             | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

## Learning Outcomes:

### Knowledge:

- K1.** Undertake project definition, project planning and project implementation using key tools and techniques for effective project management.

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- K2.** Appraise and infer the effective and efficient practices for process monitoring, quality control and assurance.

### Skills:

- S1.** Critically analyse strategic quality control practices and their application to organisational realities.
- S2.** Critique the terminology, tools, techniques, and processes in project management.

### Application of knowledge and skills:

- A1.** Utilise and engage with the fundamental tools in strategic human resource management including the planning, development, implementation and evaluation of HR activities.
- A2.** Assess team dynamics and reflect on team performance improvement techniques.

### Course Content:

Topics will include:

- Project governance
- Financial management
- Time management
- Monitoring the change control process
- Quality assurance
- Quality control
- Resource management
- Organisational planning
- Staff acquisition and team development

### Values:

- V1.** Recognise the importance of quality control and monitoring practices in project management.
- V2.** Appreciate and utilise the strategies and tools for staff acquisition and development.

### Graduate Attributes:

FedUni graduate attributes statement. To have graduates with knowledge, skills and competence that enable them to stand out as critical, creative and enquiring learners who are capable, flexible and work ready, and responsible, ethical and engaged citizens.

| Attribute                                 | Brief Description   | Focus |
|---|---|-------|
| Knowledge, skills and competence          | Resource management is an important area which has implications in our every-day life. Students will gain knowledge and develop an appreciation to apply them in real life.   | High  |
| Critical, creative and enquiring learners | Development of independent, critical and creative learners is an essential feature of engineering education. Assessments tasks are individualised, so students need to rely on their personal efforts to arrive at their conclusions. | High  |

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| Attribute                                 | Brief Description  | Focus |
|---|--|-------|
| Capable, flexible and work ready          | A sound understanding of resource planning are an essential part of any modern society. Successful students will add to the productive capacity of the economy.  | High  |
| Responsible, ethical and engaged citizens | Students are made aware that the engineer does not work or act in isolation, but is part of a wider community that includes many stakeholders, some of which may have no technical knowledge of what the engineer does. An awareness of community as a responsible, ethical and engaged citizen is important when finding a managerial solution. | High  |

## Learning Task and Assessment:

| Learning Outcomes Assessed | Learning Tasks   | Assessment Type              | Weighting |
|----------------------------|--|------------------------------|-----------|
| K1-2, S1-2, A1-2           | Problem based task on project governance and control processes.  | Assignment                   | 20 - 40%  |
| K1-2, S1-2, A1-2           | Group based research activity into current practices in quality control and assurance.   | Report                       | 30 - 50%  |
| K1-2, S1-2, A1-2           | Problem based questions and oral presentation on organisational planning and/or strategic human resources techniques and activities. | Report and oral presentation | 20 - 40%  |

## Adopted Reference Style:

Other (IEEE)