

# Course Outline (Higher Education)

<b>School:</b>	School of Engineering, Information Technology and Physical Sciences
<b>Course Title:</b>	ASSET MANAGEMENT TECHNIQUES
<b>Course ID:</b>	MREGC5004
<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 covers asset management including relevant international standards such as ISO55000, ISO55002 and ISO55010 to support the application of the ISO55001 requirements. It also covers the Asset Management System (documented system) and the development of Strategic Asset Management Plan (SAMP), Asset Management Plan (AMP) in-line with ISO55001 standard and the application of Reliability Centred Maintenance processes. Analysis of costs, budgets and risks, Logistic Support and Inventory required for maintenance management and requirements of Asset Information Systems are also covered in this course.

**Grade Scheme:** Graded (HD, D, C, P, MF, F, XF)

**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:

On successful completion of the course the students are expected to be able to:

#### Knowledge:

- K1.** Describe the scope of Asset Management as per international standard.
- K2.** Explain the techniques used in asset management.
- K3.** Recognise and describe processes used to solving a variety of real-life asset management problems.

#### Skills:

- S1.** Assess SAMP and AMP in-line with the international standard.
- S2.** Develop and implement SAMP and AMP in-line with the international standard.

#### Application of knowledge and skills:

- A1.** Apply requirements of international standard in developing SAMP & AMP.
- A2.** Evaluate and reduce gaps in SAMP & AMP.
- A3.** Solve real life asset management problems for reducing costs and risks and enhancing performance.

#### Course Content:

This course covers Asset management standard in line with ISO55000, ISO55002 and ISO55010 to support the application of the ISO55001 requirements.

Topics may include:

- Introduction to Asset Management.
- ISO5500x series of standards.
- Reliability Centred Maintenance (RCM).
- Life Cycle Costing, budgeting and risk applicable to asset management.
- Logistic support and inventory management.
- Assets and Asset Information System.
- Equipment Replacement, Reliability, Availability and Maintainability and KPI.
- Maintenance organisation and budget.

#### Values:

- V1.** Be confident in applying international standard in asset management.
- V2.** Be a global professional in application of international asset management standard.

#### 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)	Assessment task (AT#)
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 A1, A2, A3	AT1-AT2-AT3
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.	K1, K2, S1, S2 A3	AT1-AT2-AT3
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, K2, S1, A1	AT1-AT2-AT3
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, K2, K3 S1 S2 A1, A2, A3	AT1-AT2-AT3
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.	K2, K3 S1, S2 A1, A2, A3	AT1-AT2-AT3

### Learning Task and Assessment:

This 15 CP online course at postgraduate level requires a minimum time commitment of 150 hours of study. Assessments need to be submitted online in assessment submission area allocated for each assessment.

Learning Outcomes Assessed	Learning Tasks	Assessment Type	Weighting
K1-K2-K3-S1-S2-A1-A2-A3	Report of review or development of Strategic Asset Management Plan.	Report	20% - 40%
K1-K2-K3-S1-S2-A1-A2-A3	Analysis and report of Asset Management Plan.	Analysis and report	40% - 50%
K1-K2-K3-S1-S2-A1-A2-A3	Review of online posts and discussion.	Online discussion	10% - 20%

### Adopted Reference Style:

Other (IEEE)

Refer to the [library website](#) for more information

Fed Cite - [referencing tool](#)