

## 10160NAT

# Graduate Certificate in Asset Management

The Institute of Quality Asset Management (IQ-AM) *Graduate Certificate in Asset Management* (GC-AM) is a post-graduate competency based qualification designed to provide middle management and senior professionals with the skills and knowledge to participate in, and lead, the practical planning and implementation of Asset Management (AM) and adoption of an AM framework or system, such as the ISO 55001 Asset Management System (AMS), in their area of responsibility.

### Course Objectives

Provide participants with the skills and knowledge to implement and apply Asset Management to managing assets in an asset dependant organisation.

The course consists of 5 Units of Competency delivered in 14 training modules:

- AMSBMS801 Manage Asset Data Knowledge
- AMSBMS802 Manage Risk and Performance of Assets
- AMSBMS803 Develop and Implement Asset Management Plans
- AMSBMS804 Formulate a Business Case for Expenditure Programs
- AMSBMS805 Prepare Operational and Capital Plans

### Pre-requisites

The course is available to participants who have either technical/trade backgrounds or bachelor (AQF Level 7) qualifications. Greatest benefit is gained by participants if they have sufficient relevant work experience in an Asset Management related field. If you have any concerns, please contact us to discuss your specific circumstances.

### Recognition of Prior Learning

Participants undertake workplace based assessment tasks to develop and demonstrate competency, however it may be possible for participants to submit evidence of previous experience if the outputs of that experience correspond to the specific Assessment Task requirements (you can discuss this with the IQ-AM facilitator, or contact our office).

### Costs and Inclusions

The cost for the qualification is inclusive of all books, materials, tuition (both in person and remote) and assessment marking.

### How to Contact Us

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Please contact us for further information.

## **10160NAT Graduate Certificate in Asset Management Delivery Program**

The GC-AM consists of the modules outlined below. These are normally delivered in a 3 x 2 day intensive short course format set of workshops and workplace activities separated by periods of workplace application and private study.

Subject to personal circumstances (such as pre-existing knowledge, skill and experience or participating as part of a team), the actual amount of additional personal study and/or workplace application time could be substantial.

### **Course Induction and Orientation**

#### **Organisational Context**

##### **Asset Management overview**

This module introduces the concept of Asset Management (AM) and its application in an asset dependant organisation. It addresses:

- Definition of assets and their management within an Asset Management System (AMS).
- The operating context of the organisation, stakeholder requirements, and the evolving need for AM.
- What is Asset Management? The systems approach and AM frameworks.
- What are the key benefits? Generating value from assets.
- How does Asset Management 'fit' in the organisation roles, responsibilities, competency and leadership?
- Interpreting and implementing the organisation's AM policy.

Participants develop an appreciation of the breadth, depth and significance of AM in an asset dependant organisation by researching, analysing and benchmarking their organisation's approach.

#### **Manage asset data and knowledge**

##### **Preparing the asset inventory – technical elements**

This module allows participants to develop an understanding of the need for technical asset information, the guiding principles for structuring asset knowledge and data, the principles behind different asset registers and hierarchies, and the need and structure of data standards and inventories, data integrity and verification.

Participants apply their learning's by the development or critical evaluation of a 'base' data set that can be used for ongoing analysis and management of an asset, setting data standards and establishing management processes; including for collection, storage manipulation and access.

##### **Determining current asset capability and performance**

This module analyses the relationship of asset age, condition and life stages to its changing capability to meet required performance targets and hence optimising value.

By setting up and populating performance evaluation and condition monitoring frameworks, participants gain an understanding of the relationships and interactions of asset age and condition and corresponding ability to meet performance needs and the rational and uses for the determination of asset useful and residual lives.

## **Preparing the asset inventory – financial elements**

This module looks at the financial aspects of acquiring, owning and disposing of assets. It introduces the concept of life cycle costing, the requirements for financial reporting and accounting for assets, and the fundamentals of different costing methodologies, focusing on determining the current replacement cost.

Participants learn to apply basic AM and life cycle costing principals to determining asset value and depreciation through linking of technical data to financial data.

## **Preparing a State of the Assets Report**

This module concentrates on the concepts and principles behind the preparation of 'State of the Assets' reports. At completion of this module, participants prepare and present a State of the Asset report.

## **Determining required and future levels of service**

In this module, participants are introduced to the concepts behind establishing Levels of Service to optimise value to the organisation and stakeholders. Participants apply these concepts and are required to develop a level of service specification or plan for their assets. Key Level of Service concepts introduced include:

- Customer demand for services or products.
- The breadth and depth of the concept of levels of service.
- Sustainable service delivery
- Demand management.
- Regulatory requirements.
- Multi-criteria analysis.
- Meeting organisational objectives and the level of service hierarchy.
- Alignment of operations, maintenance and capital planning
- Performance metrics
- Linking to capacity and utilisation
- Predicting future trends
- Level of service plans

## **Manage risk and performance of assets**

### **Manage risk and performance of assets**

In this module, participants:

- Develop an understanding of the application of risk management principles to assets.
- Analyse asset related risks within the context of organisational risk management.
- Establish an asset criticality based decision making framework, including addressing the need to manage how risks change over time.
- Determine prioritised risk mitigation strategies and action plans.
- Analyse the essential elements of sound contingency and organisational continuity planning.
- Understand and apply emergency management strategy planning.

## **Prepare operational and capital plans**

### **Managing the Asset Life Cycle – planning and implementing maintenance, operations and capital plans**

In this module, participants learn to develop and apply asset decision making frameworks, apply the concept of optimised decision making and the need to link asset maintenance, renewal, replacement and augmentation to meeting the ongoing need for service delivery, and meeting of organisational objectives and stakeholder needs and requirements.

## Develop and implement Asset Management plans

### Preparing the Asset Management Plan

Participants develop an Asset Management plan in this module. Key issues addressed include:

- Validating the operational context.
- Identifying the users (stakeholders) of the Plan.
- Resourcing the Plan.
- Determining the processes and KPI's to monitor ongoing implementation and review.
- Designing and structuring the plan.
- Linking the financial and technical aspects of AM planning.
- Populating the Plan.

### Asset Management systems improvement planning

This module provides participants with a structured approach to improving the quality of their AM and AMS through the use of a quality system based gap analysis against ISO 55001 Asset Management Systems requirements. Based on information gathered during the previous training module assessment tasks, participants conduct a gap analysis and identify and prioritise improvements.

Participants consider the interrelationships between meeting organisational objectives, their AM and AMS Plans, AMS performance reporting, management review and continuous improvement.

## Formulate a business case for expenditure programs

### Selling business cases

In order to carry out any activities within an organisation, authorisation and approvals are required from responsible staff or management and/or stakeholders, such as regulators. The need to justify allocation of resources and expenditure is therefore dependant on persuading others to agree with your recommended actions. This module requires participants to investigate their organisation's approval processes and to prepare a dot pointed management plan to 'manage' the process and relevant stakeholders.

### Preparing a business case

Drawing on the outputs from the assessment tasks for the previous modules, participants prepare a business case for approval. The module covers key features of preparing a business case, including:

- Structure
- Content
- Cost-benefit analysis
- Options analysis
- Conclusions
- Recommendations
- Executive Summary

### Where to from here – change management – personal and team action planning

This module summarises the key learning's from the course and challenges participants with the need to address the fundamental issues behind change management including the key risks created.

Participants are challenged to develop action plans for changes they are going to undertake on return to work, one personal and one team based.