



Australian Government

Department of Education, Employment and Workplace Relations

MEM22003A Manage engineering resources

Release: 1

MEM22003A Manage engineering resources

Modification History

Not Applicable

Unit Descriptor

Unit descriptor	This unit covers skills and knowledge required for coordinating business planning, managing resources and applying engineering regulations related to use of resources.
------------------------	---

Application of the Unit

Application of the unit	<p>This unit applies to managing resources in accordance with a business plan for typical engineering processes, projects or services.</p> <p>This unit only has application in qualifications that are not points based.</p> <p>Band: 0</p> <p>Unit Weight: 0</p>
--------------------------------	--

Licensing/Regulatory Information

Not Applicable

Pre-Requisites

Prerequisite units		
Path 1	MEM16006A	Organise and communicate information

Employability Skills Information

Employability skills	This unit contains employability skills.
-----------------------------	--

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
---	--

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Participate in team business planning	1.1. Work with others in an engineering environment. 1.2. Work with others to develop the engineering team's performance plan. 1.3. Implement processes to monitor and adjust team performance.
2. Develop client relations	2.1. Ensure delivery of quality engineering products and services.
3. Manage cost	3.1. Monitor costs and cash flow. 3.2. Prepare financial records. 3.3. Monitor maintenance of assets/resources. 3.4. Manage waste and recycling across engineering operations/projects.
4. Manage physical resources	4.1. Develop a physical resource and energy distribution plan. 4.2. Manage physical resources and energy distribution efficiently and in a sustainable manner. 4.3. Ensure compliance with regulations and OHS&E procedures.
5. Manage human resources and relations	5.1. Develop a flexible workforce plan. 5.2. Manage performance of staff. 5.3. Manage staff training and education including organizational skills audit and staff assessment.
6. Manage business information	6.1. Prepare and present business plans/budgets in accordance with the organisation's guidelines and requirements.
7. Monitor and review service delivery	7.1. Develop performance indicators to measure levels of service. 7.2. Review the achievement of service indicators where appropriate.

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

REQUIRED SKILLS AND KNOWLEDGE

Required skills

Look for evidence that confirms skills in:

- understanding of engineering team member roles, responsibilities and accountabilities
- implementing team performance plan
- evaluating engineering team's performance against the performance plan
- adjusting the engineering team's performance plan in accordance with the organisation's continuous improvement processes
- providing quality engineering products and services to meet the client's needs
- obtaining feedback is from clients on the products and services provided
- monitoring costs and cash flows
- preparing and maintaining financial records
- maintaining assets and resources and determining and recording associated costs
- minimising and/or recycling waste products
- providing for physical resources required by the processes, products, services or projects in the resources plan
- utilising development processes and/or alternative sources to overcome resource deficiencies
- providing for efficiency improvements and sustainability in physical resources and energy management plans
- sourcing and using data on resources and energy usage
- recording and maintaining regulations and safety requirements associated with the handling, storage and use of resources
- training personnel in the handling, storage and use of resources in accordance with readily accessible procedures and data sheets
- performing risk assessment related to the handling, storage and use of resources
- identifying skills training required to overcome skills gaps
- coaching and mentoring team members as required to optimise procedures
- implementing remuneration policy that recognises staff performance and industrial relations issues
- performing staff training and education procedures
- completing organisational skills audits and staff assessments
- preparing business plans/budgets
- developing service performance indicators
- reviewing performance and service performance indicators where available in service delivery

Required knowledge

Look for evidence that confirms knowledge of:

- the purpose, roles, responsibilities and accountabilities of the engineering team and

REQUIRED SKILLS AND KNOWLEDGE

- its members
- the organisation's business plan policies and practices
- the competencies of team members
- the ways in which the team can benefit from the diversity of its membership
- the organisation's continuous improvement policies and procedures
- the procedures for monitoring team performance
- client's engineering requirements
- alternative supply options and the implications of those options for customers
- budgeted costs and projected cash flows
- actual costs, compared and contrasted to budgets and projections
- cost control strategies
- financial records to be kept
- the procedures for preparing and maintaining financial records
- the financial impact of a variety of maintenance strategies on overall costs
- the waste products associated with the process
- opportunities for recycling waste products
- strategies to minimise waste
- the costs and benefits of waste minimisation and recycling opportunities
- corporate reporting on environmental matters
- physical resource and energy requirements to meet process, product, service, project design and business goals
- physical resource and energy requirements are reviewed to ensure efficient and sustainable use.
- physical resources and energy management information systems appropriate for the effective storage and retrieval of data for decision making
- the procedures for preparing physical resources and energy use data for business plans/budgets
- personnel access and understand regulations and procedures related to handling, storage and use of resources, evacuation, fire and accident.
- training in handling, storage and use of resources, evacuation, fire and accident
- risk assessment related to the handling, storage and use of resources
- operating procedures associated with the use of resources
- human resource requirements to meet business goals
- legislative and regulatory requirements relating to the selection and employment of personnel
- skill gaps
- performance management procedures for staff in relation to business plan
- coaching, mentoring and financial reward policies in relation to business plan.
- staff training and education, organizational skills audit processes and staff assessment procedures
- management information systems appropriate for the effective storage and retrieval

REQUIRED SKILLS AND KNOWLEDGE

- of data for decision making
- the procedures for preparing business plans/budgets
- measures of appropriate service provision
- the capability of the organisation to deliver the required service
- strategies to improve upon agreed service indicators
- the capability alterations required to achieve revised service indicators

Evidence Guide

EVIDENCE GUIDE	
<p>The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.</p>	
<p>Overview of assessment</p>	<p>A person who demonstrates competency in this unit must be able to manage engineering resources. Competency in this unit cannot be claimed until all prerequisites have been satisfied.</p>
<p>Critical aspects for assessment and evidence required to demonstrate competency in this unit</p>	<p>Assessors must be satisfied that the candidate can competently and consistently perform all elements of the unit as specified by the criteria, including required knowledge, and be capable of applying the competency in new and different situations and contexts.</p>
<p>Context of and specific resources for assessment</p>	<p>This unit may be assessed on the job, off the job or a combination of both on and off the job. Where assessment occurs off the job, that is the candidate is not in productive work, then an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by an individual working alone or as part of a team. The assessment environment should not disadvantage the candidate.</p> <p>This unit could be assessed in conjunction with any other units addressing the safety, quality, communication, materials handling, recording and reporting associated with managing engineering resources or other units requiring the exercise of the skills and knowledge covered by this unit.</p>
<p>Method of assessment</p>	<p>Assessors should gather a range of evidence that is valid, sufficient, current and authentic. Evidence can be gathered through a variety of ways including direct observation, supervisor's reports, project work, samples and questioning. Questioning techniques should not require language, literacy and numeracy skills beyond those required in this unit of competency. The candidate must have access to all tools, equipment, materials and documentation required. The candidate must be permitted to refer to any relevant workplace procedures, product and manufacturing specifications, codes, standards, manuals and reference materials.</p>

EVIDENCE GUIDE

Guidance information for assessment	
--	--

Range Statement**RANGE STATEMENT**

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Engineering environment

Refers to a real or simulated environment dealing in engineering practices/functions/services.

Business plans

Refers to the development of plans for personal and team performance to meet agreed business objectives This is to be carried out in an inclusive manner which encourages team participation

OHS&E

Occupational Health Safety and Environment recognizes that stakeholders in workplace activity include the workforce exposed to worksite conditions, materials and processes of the activity and the broader community exposed to environmental effects of the activity. Apply in accordance with organisational policies and statutory and regulatory requirements.

Unit Sector(s)

Unit sector	
--------------------	--

Co-requisite units

Co-requisite units		

Competency field

Competency field	Management and organisation
-------------------------	-----------------------------