Australian Government

MEM09201 Work effectively in an engineering drafting workplace

Release: 1

MEM09201 Work effectively in an engineering drafting workplace

Modification History

Release 1. Supersedes and is equivalent to MEM09201A Work effectively in an engineering drafting workplace.

Application

This unit of competency defines the skills and knowledge required to provide drafting services according to the systems and standards expected in industry. It includes an understanding of work contexts, stakeholder needs, employment conditions and expectations and of the way drafting is used across different engineering disciplines.

This unit is suitable for those working within a computer-aided design (CAD) or drafting work environment.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Competency Field

Drawing, drafting and design

Elements and Performance Criteria

Elements	**Performance Criteria**
Elements describe the essential outcomes.	*Performance criteria describe the performance needed to demonstrate achievement of the element.*
1. Identify the work context and setting	1.1 Identify key products and services and the scope and nature of the organisation 1.2 Identify legislation, organisational procedures and industry standards relevant to the workplace 1.3 Identify key aspects of the workflow in the organisation and its application to own work 1.4 Identify key personnel and their role and relationship to own work 1.5 Evaluate impact of trends on work practices
2. Examine role of drafting	2.1 Identify roles and key responsibilities in drafting work, including processes involved in detail and design drafting work 2.2 Identify stakeholders of drafting projects and their information and service needs

Elements	**Performance Criteria**
Elements describe the essential outcomes.	*Performance criteria describe the performance needed to demonstrate achievement of the element.*
	2.3 Read, interpret and use industry terminology 2.4 Determine the needs and features of drafting work undertaken for different engineering disciplines 2.5 Determine the role of computer programs in design and detail drafting work
3. Accept responsibility for own work	3.1 Identify own work responsibilities, obligations, employment conditions and role within work group or area 3.2 Determine work priorities and deadlines and plan work activity accordingly 3.3 Apply organisational work health and safety (WHS) procedures when conducting work and ensure quality standards are met 3.4 Access and use work information, technology and resources to complete work 3.5 Apply time-management skills and communicate if timelines are compromised 3.6 Identify skill development needs and seek assistance 3.7 Minimise impact of work on the environment and conduct housekeeping to maintain workplace
4. Work with others	4.1 Identify roles of team members 4.2 Participate in the development and review of team goals and activities and contribute to continuous improvements 4.3 Contribute to team meetings using effective communication skills and show for varying opinions and differences 4.4 Address work conflicts professionally using effective communication skills and refer to appropriate personnel if necessary
5. Apply safe and sustainable work practices	5.1 Apply workplace health and safety (WHS) procedures and practices at all times 5.2 Collaborate with others and contribute to positive work environment 5.3 Minimise resource use in own work and contribute to efficiency improvements 5.4 Comply with enterprise environmental regulations and report breaches and environmental hazards to designated personnel

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.	
Standards and codes include one or more of the following:	• Australian drawing standards • third-party manufacturing and installation standards • organisational standards • project and industry guidelines • manufacturer catalogues and specifications.
Stakeholders include one or more of the following:	• clients • engineers • builders • architects • tradespeople • designers • management • team members • cross-function support groups • experts • appropriate licensed technicians and professionals.
Engineering disciplines include one or more of the following:	• mechanical • air conditioning and mechanical services • mechatronics • electrical • manufacturing • fabrication • naval architecture • structural • civil • mining • materials handling.
Responsibilities, obligations and employment conditions	• job description and employment arrangements • organisation's policy relevant to work role • team structures

include one or more of the following:	• supervision and accountability requirements, including WHS • environmentally sustainable work practices • industrial awards • enterprise agreements • industry or workplace codes of practice • skills, training and competencies • codes of conduct.
Communication skills includes:	• active listening • numeracy skills to the level required to interpret workplace documents • verbal skills to convey meaning and add to discussion • reading and writing skills to the level required to interpret and contribute to work information • use of templates, conventions and communication protocols appropriate to the organisation, project and type of drawing.
Efficiency improvements include changes to work practices which result in one or more of:	• reduction in resource consumption, including water, electricity or materials • waste minimisation or improved management • pollution controls • equipment maintenance and longevity • improved workplace layout • reduced transportation or movement • cost savings • increased re-use or recycling and use of renewable resources • greater education and understanding of sustainable work practices • greater measurement of resource use • selection of more environmentally friendly materials, resources or practices • prevention or minimisation of risks.

Environmental hazards include one or more of the following:	• substances (resources, waste and by-products) that are dangerous to living things in the environment including humans, animals, plants and water, including storage, handling and disposal of the following substances:
	  • toxic
	  • corrosive
	  • flammable
	• explosives
	• other infectious or dangerous substances.

Unit Mapping Information

Release 1. Supersedes and is equivalent to MEM09201A Work effectively in an engineering drafting workplace.

Links

Companion Volume implementation guides are found in VETNet - https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b7050d37-5fd0-4740-8f7d-3b7a49c10bb2