Australian Government

Department of Education, Employment and Workplace Relations

MSACMT660A Develop the application of enterprise systems in manufacturing

Revision Number: 1

ISC INDUSTRY SKILLS COUNCILS
Creating Australia's Future

MSACMT660A Develop the application of enterprise systems in manufacturing

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit covers the knowledge and skills needed to continuously modify and improve or develop new enterprise wide systems such as SCADA, ERP, MRPII and similar. Typically the development of such a system will be in liaison with an appropriate technical expert who may be an internal expert or an external consultant.

Application of the Unit

Application of the unit	This unit covers the development and implementation of new systems or modifications/changes to the current system. While the person might generate the ideas for change themselves and also undertake a significant part of the final implementation, they would be working closely with an appropriate technical expert (such as the software system supplier) who may actually make the modifications.
	This unit primarily requires the application of skills associated with communication in gathering, analysing and applying information and consulting with stakeholders. Teamwork, problem solving, initiative and enterprise, and planning and organising skills are required to determine and implement effective enterprise systems and modifications. This unit also requires computer skills and aspects of self management and learning to ensure feedback and new learning is integrated into system planning.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units	

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. Monitor information and control needs of organisation	1.1. Check the use of current information 1.2. Check the operation of current control systems 1.3. Communicate regularly with key information users regarding improved/changed information/control needs 1.4. Identify short comings in information/control provision 1.5. Take appropriate action on information/control needs to meet organisational needs
2. Check the current system against organisation needs	2.1. Check the routine use of the system 2.2. Communicate regularly with key stakeholders about current system use and application 2.3. Identify problems/issues 2.4. Take appropriate action on problems/issues
3. Determine developments needed in a new or significantly modified system	3.1. Identify needs requiring a new system or development of modifications to the current system 3.2. Draft scope, specifications and outcomes required 3.3. Liaise with key stakeholders and relevant technical experts to refine scope, specifications and outcomes needed in new or modified system 3.4. Agree final scope, specifications and outcomes
4. Develop system	4.1. Develop project plan 4.2. Ensure ongoing consultation with all relevant stakeholders 4.3. Manage development project 4.4. Manage trialling of modified system 4.5. Ensure modified system meets organisational requirements
5. Implement modified system	5.1. Liaise with all affected personnel 5.2. Develop and agree an implementation strategy 5.3. Ensure all personnel have required skills 5.4. Implement modified system 5.5. Monitor implementation and modify as required

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Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

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

Required skills

- keyboarding/mousing
- communication
- teamwork
- problem solving
- negotiation
- prioritising
- planning
- analysing
- organisation

Required knowledge

- capability of resource planning/SCADA systems as appropriate
- information and control needs of organisation/process
- project management
- support/training/skill development mechanisms available for access by personnel

Evidence Guide

EVIDENCE GUIDE	
The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, the range statement and the assessment guidelines for this training package.	
Overview of assessment requirements	The person will be able to modify an existing system to accommodate changed needs of the organisation, or make improvements to an existing system to better do what it is already doing. They could also work with relevant experts to implement a new system to an organisation, process or part of a process.
What are the specific resource requirements for this unit?	Access to an organisation operating systems and undertaking developments to its system.
In what context should assessment occur?	Assessment would need to occur in an organisation using or introducing SCADA, resource planning or similar systems or a suitable simulation.
Are there any other units which could or should be assessed with this unit or which relate directly to this unit?	This unit could be assessed concurrently with units of project management, product design or process improvement/ optimisation.
What method of assessment should apply?	Assessors must be satisfied that the person can consistently perform the unit as a whole, as defined by the Elements, Performance Criteria, skills and knowledge. A holistic approach should be taken to the assessment. Assessors should gather sufficient, fair, valid, reliable, authentic and current evidence from a range of sources. Sources of evidence may include direct observation, reports from supervisors, peers and colleagues, project work, samples, organisation records and questioning. Assessment should not require language, literacy or numeracy skills beyond those required for the unit. The assessee will have access to all techniques, procedures, information, resources and aids which would normally be available in the workplace. The method of assessment should be discussed and agreed with the assessee prior to the commencement of the assessment.
What evidence is required for demonstration of consistent performance?	Where evidence is provide from small developments, a range of development activities should be considered to provide sufficient evidence. Where evidence is from one complex development project, this may provide sufficient evidence.

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.	
SCADA	System Control and Data Acquisition (SCADA) is a general term applied to a number of systems which automatically collect critical process data, perform required mathematical manipulations on it and then make control decisions and/or give required information personnel for action. In the continuous manufacturing sector, the SCADA system is sometimes integrated into other sophisticated computer control systems such as Distributed Control System (DCS) and indeed these systems do merge in advanced systems. These organisations may simply refer to their SCADA as the DCS or other similar term (such as the proprietary name of the computer system).
Resource planning	Planning software is a general term applied to a number of software systems which integrate a range of business information such as finance, logistics maintenance and production. It is frequently referred to by names such as ERP, SAP, MRP/MRPII.
Value chain	Competitive manufacturing organisations encompass the entire production system, beginning with the customer, and includes the product sales outlet, the final assembler, product design, raw material mining and processing and all tiers of the value chain (sometimes called the supply chain). Any truly 'competitive' system is highly dependent on the demands of its customers and the reliability of its suppliers. No implementation of competitive manufacturing can reach its full potential without including the entire 'enterprise' in its planning.

Unit Sector(s)

Unit Sector	CM Tools

Co-requisite units

Co-requisite units	

Functional area

Functional Area	