Australian Government

Department of Education, Employment and Workplace Relations

MSA41108 Certificate IV in Competitive Manufacturing

Revision Number: 2

MSA41108 Certificate IV in Competitive Manufacturing

Modification History

This qualification has been superseded by MSS40312 Certificate IV in Competitive Systems and Practices from MSS11v2 Sustainability Training Package. Equivalent outcomes.

Description

The Competitive Manufacturing units of competency are categorised into three groups:

- Systems units
- Change/interpersonal units
- Tools units

Licensing considerations
There are no specific licenses that relate to this qualification. However, some units in this qualification may have licensing or regulatory requirements depending on the work context. Local regulations should be checked for details.

Pathways Information

Not applicable.

Licensing/Regulatory Information

Not applicable.

Entry Requirements

Not applicable.

     Manufacturing Skills Australia

Employability Skills Summary

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
MSA41108 Certificate IV in Competitive Manufacturing The following table contains a summary of the employability skills as identified by industry for this qualification. This table should be interpreted in conjunction with the detailed requirements of each unit of competency packaged in this qualification. The outcomes described here are broad industry requirements that reflect skill requirements for this level.	
Employability Skill	**Industry/enterprise requirements for this qualification include**:
Communication	• Implement OHS procedures and distribute related safety information • Complete, access and interpret standardised documentation on behalf of self and other team members • Share and discuss information with others about work activities • Access and apply workplace procedures • Provide information to team members about workplace procedures • Read and interpret instructions, specifications, standard operating procedures and other work related documents • Seek assistance or information from relevant personnel or supervisors • Debrief on workplace changes with relevant stakeholders • Record production or other work related information • Access and use workplace communication tools and equipment • Apply numeracy skills to work procedures • Provide information about team activities to supervisors, managers and customers
Teamwork	• Identify roles of other work colleagues including formal team members where teamwork is used as the form of work organisation • Lead others in a production environment • Share production or work related information with peers including team members, supervisors and management • Identify hazards to self and other team members • Recognise the value chain and advise team members as to how they can contribute to the final quality of the product • Review changes to work practices and work relationships with supervisors • Provide assistance with work operations as required • Seek assistance with work operations as required

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

	• Participate in multidisciplinary teams as required
Problem solving	• Monitor workplace activities • Report inconsistencies, non-compliances, faults or hazards • Identify factors within team or work area that are a constraint to work efficiency or reaching of production outcomes • Distinguish between essential and non-essential practices • Implement methods of increasing features/benefits of products or processes • Monitor jobs within team and make improvements to work organisation • Note steps which cause a problem and implement improvement process • Improve OHS • Compare required performance with actual performance • Identify situations where compliance to specifications or safety standards is unlikely • Recommend and implement improvements • Distinguish between random and identifiable causes of work problems • Identify causes of identified faults and take appropriate action • Investigate causes of quality deviations • Undertake root cause analysis • Identify deviations and fault patterns
Initiative and enterprise	• Provide feedback on procedures and systems • Analyse feedback on procedures and systems • Analyse problems, implications or suggestions for improvements • Adjust work activity according to changes in work requirements • Take correct action and follow procedures • Identify methods of increasing own and team contribution to the value chain • Recommend changes and improvements • Take action to make improvements • Implement changes • Monitor actions to ensure cost efficiency • Implement 5S procedures • Implement work practices to reduce waste • Participate in multidisciplinary teams to develop new products or processes
Planning and organising	• Plan own work and work of team to meet required standards • Ensure the work area complies with OHS procedures

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
	• Organise processes, tools and materials • Implement improvements in accordance with procedures • Monitor and adjust production/process • Distinguish between essential and non-essential practices • Set the workplace in order • Implement use of planning tools within work of team • Implement 5S procedures • Determine and prioritise required actions • Collect, organise and analyse information from work activity
Self-management	• Conduct all work activities according to safety and workplace standards • Implement and maintain housekeeping standards • Achieve production outcomes • Monitor own performance • Interpret data and information as required by own job • Ask questions to ensure understanding of own work requirements • Recommend methods of increasing own contribution to the value chain • Adjust work processes according to procedures • Identify and manage impacts in own work area • Monitor resource use and minimise waste in own work activity • Keep the workplace clean and tidy • Assess own work • Set personal objectives for work performance • Manage own time
Learning	• Attend skill development training • Adapt to changing work requirements • Ask questions to aid learning • Identify skill requirements of self and team members • Seek skills development and training to meet needs • Identify personal skill gaps and additional skills needs • Ask questions to ensure understanding of own work requirements • Monitor own work and identify areas for improvement • Seek feedback on work performance • Provide feedback on work performance
Technology	• Work with technology safely and according to workplace standards • Identify equipment and processes appropriate for job and skill

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
	level
	• Handle and use equipment correctly and safely and within skill level
	• Assess operational efficiency of technology within own skill level and that of team members
	• Recognise and report faulty operation of equipment
	• Collect and apply data and information from technology
	• Use information technology appropriate for job
	• Implement maintenance procedures appropriate to job and skill level of team

Packaging Rules

Packaging Rules
To be awarded a Certificate IV in Competitive Manufacturing, competency must be achieved in **ten** (**10**) units of competency.

- **one** (**1**) core unit of competency
- **nine** (**9**) elective units of competency, four (4) of which may be selected from this Training Package, other endorsed Training Packages and accredited courses, as specified below.

The ten (10) units must include at least three Competitive Manufacturing (CM) 400 series units that are additional to any already achieved as part of the Certificate III or other recognition pathway.

Note: Where prerequisite units are identified they must be counted in the total number of units required for completion of the qualification.

Core units of competency

- Complete the following **one** (**1**) unit from this list.

Unit code	Unit title
MSACMC410A	Lead change in a manufacturing environment

Elective units of competency

Group A - **Systems**

- Select a minimum of **one** (**1**) unit from the following list.

Unit code	Unit title
MSACMS400A	Implement a competitive manufacturing system
MSACMS401A	Ensure process improvements are sustained
MSACMS405A	Lead a manufacturing team using a balanced score card approach

Group B - **Change/interpersonal**

- Select a maximum of **one** (**1**) unit from the following list.

Unit code	Unit title
MSACMC411A	Lead a competitive manufacturing team
MSACMC413A	Lead team culture improvement

Group C - **Tools**

- Select a minimum of **two** (**2**) units from the following list.

Unit code	Unit title	Prerequisite
MSACMT421A	Facilitate a Just in Time (JIT) system	
MSACMT423A	Monitor a manufacturing levelled pull system	
MSACMT430A	Improve cost factors in work practices	
MSACMT432A	Analyse manual handling processes	
MSACMT440A	Lead 5S in a manufacturing	

Unit code	Unit title	Prerequisite
	environment	
MSACMT441A	Facilitate continuous improvement in manufacturing	
MSACMT450A	Undertake process capability improvements	MSACMT452A
MSACMT451A	Mistake proof a production process	
MSACMT452A	Apply statistics to processes in manufacturing	
MSACMT453A	Use six sigma techniques	MSACMT452A
MSACMT460A	Use planning software systems in manufacturing	MSACMT260A
MSACMT461A	Facilitate SCADA systems in manufacturing team or work area	MSACMT261A
MSACMT481A	Undertake proactive maintenance analyses	
MSACMT482A	Assist in implementing a proactive maintenance strategy	
MSACMT483A	Support proactive maintenance	
MSAENV472B	Implement and monitor environmentally	

Unit code	Unit title	Prerequisite
	sustainable work practices	
MSAPMSUP390A	Use structured problem solving tools	

Group D - **Balance of units**

The balance of units, to a maximum of **five** (**5**) may be drawn from any combination of:

- units from Group A and Group C above, not previously selected
- elective units listed below (note that a maximum of two of these can be from 200 series units)

Unit code	Unit title	Prerequisite
MSACMC210A	Manage the impact of change on own work	
MSACMC610A	Manage relationships with non-customer external organisations	
MSACMC611A	Manage people relationships	
MSACMC612A	Manage workplace learning	
MSACMC613A	Facilitate holistic culture improvement in a manufacturing enterprise	
MSACMC614A	Develop a communications strategy to support production	
MSACMS200A	Apply competitive	

Unit code	Unit title	Prerequisite
	manufacturing practices	
MSACMS201A	Sustain process improvements	
MSACMS600A	Develop a competitive manufacturing system	
MSACMS601A	Analyse and map a value chain	MSACMT631A
MSACMS602A	Manage a value chain	MSACMS601A MSACMT631A
MSACMS603A	Develop manufacturing related business plans	
MSACMS604A	Manage competitive manufacturing processes in a jobbing shop environment	MSACMS601A MSACMT280A MSACMT631A
MSACMS605A	Develop a balanced score card for use in competitive manufacturing	MSACMS601A MSACMT280A MSACMT631A
MSACMS606A	Introduce competitive manufacturing to a small or medium enterprise	
MSACMT220A	Apply quick changeover procedures	
MSACMT221A	Apply Just in Time (JIT) procedures	

Unit code	Unit title	Prerequisite
MSACMT230A	Apply cost factors to work practices	
MSACMT231A	Interpret product costs in terms of customer requirements	
MSACMT240A	Apply 5S procedures in a manufacturing environment	
MSACMT250A	Monitor process capability	
MSACMT251A	Apply quality standards	
MSACMT260A	Use planning software systems in manufacturing	
MSACMT261A	Use SCADA systems in manufacturing	
MSACMT270A	Use sustainable energy practices	
MSACMT271A	Use sustainable environmental practices	
MSACMT280A	Undertake root cause analysis	
MSACMT281A	Contribute to the application of a proactive maintenance strategy	
MSACMT452A	Apply statistics to processes in manufacturing	

Unit code	Unit title	Prerequisite
MSACMT620A	Develop quick changeover procedures	
MSACMT621A	Develop a Just in Time (JIT) system	MSACMC410A
MSACMT622A	Design a process layout	
MSACMT623A	Develop a levelled pull system of manufacturing	
MSACMT630A	Optimise cost of product	MSACMT631A
MSACMT631A	Undertake value analysis of product costs in terms of customer requirements	MSACMT230A
MSACMT632A	Analyse cost implications of maintenance strategy	
MSACMT640A	Manage 5S system in a manufacturing environment	
MSACMT641A	Implement a continuous improvement system	
MSACMT650A	Determine and improve process capability	MSACMT452A
MSACMT652A	Design an experiment	MSACMT452A
MSACMT653A	Apply six sigma to process control and	MSACMT452A

Unit code	Unit title	Prerequisite
	improvement	
MSACMT660A	Develop the application of enterprise systems in manufacturing	
MSACMT661A	Determine and establish information collection requirements and processes	
MSACMT662A	Develop a documentation control strategy for a manufacturing enterprise	
MSACMT670A	Develop and manage sustainable energy practices	
MSACMT671A	Develop and manage sustainable environmental practices	
MSACMT675A	Facilitate the development of a new product	MSACMT452A
MSACMT681A	Develop a proactive maintenance strategy	
MSACMT682A	Adapt a proactive maintenance strategy to the process manufacturing sector	MSACMT681A
MSACMT683A	Adapt a proactive maintenance	MSACMT681A

Unit code	Unit title	Prerequisite
	strategy for a seasonal or cyclical manufacturing operation	
MSAENV272B	Participate in environmentally sustainable work practices	
MSAENV672B	Develop workplace policy and procedures for environmental sustainability	
A maximum of four (4) units may be selected from this Training Package, other endorsed Training Packages and accredited courses, where those units are available for inclusion at Certificates III, IV or Diploma level. Units chosen should be relevant to the workplace and would normally be drawn from the appropriate sector Training Package, or possibly the Business Services Training Package.		