



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **MSACMT421A Facilitate a Just in Time (JIT) system**

**Revision Number: 1**

## MSACMT421A Facilitate a Just in Time (JIT) system

### Modification History

Not applicable.

### Unit Descriptor

|                        |                                                                                                                                                      |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Unit descriptor</b> | This unit covers knowledge and skills required to facilitate the implementation/operation of a Just in Time (JIT)/kanban system in the organisation. |
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### Application of the Unit

|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
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| <b>Application of the unit</b> | <p>In a typical scenario, the person will need to monitor the operation of the JIT system and facilitate its working. This will involve liaison with stakeholders as well as examining the data generated. They will need to be alert to potential problems and areas for improvement.</p> <p>This unit requires the application of skills associated with gathering, analysing and communicating information to facilitate implementation of the JIT system. It requires planning and organising skills and has a strong emphasis on communication and teamwork skills to ensure the JIT system is being effectively implemented. This unit also requires an ability to problem solve and take the initiative to consider performance issues and learn from experience to improve future performance.</p> |
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

|                           |  |
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| <b>Prerequisite units</b> |  |
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## Employability Skills Information

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| <b>Employability skills</b> | This unit contains employability skills |
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## 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. |
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## Elements and Performance Criteria

| ELEMENT                                    | PERFORMANCE CRITERIA                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Monitor the operation of the JIT system | 1.1.Track value of <b>key measures</b><br>1.2.Recognise indicators of poor performance<br>1.3.Take appropriate <b>quick fix</b> action                                                                                                                                                                                                                                                                                                                                       |
| 2. Liaise with relevant stakeholders       | 2.1.Regularly communicate with team members regarding the operation of the JIT system<br>2.2.Review JIT performance indicators with team members<br>2.3.Communicate with relevant personnel up and down the <b>value chain</b> regarding the operation of the JIT system<br>2.4.Identify issues with stakeholders and take appropriate quick fix action                                                                                                                      |
| 3. Improve the JIT system                  | 3.1.Identify areas requiring improvement in the JIT system<br>3.2.Review value of key measures<br>3.3.Recognise skill gaps in team members and other stakeholders<br>3.4.Determine any other issues in team members, other stakeholders and JIT system leading to poor performance indicators<br>3.5.Develop appropriate improvement solutions<br>3.6.Liaise with relevant people regarding these solutions<br>3.7.Implement/assist with the implementation of the solutions |

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

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

#### Required skills:

- reading
- recording
- communicating
- planning
- analysing
- problem solving
- negotiating.

#### Required knowledge:

- JIT principles relevant to jobs
- procedures for making/recommending improvements
- reasons for delays/storages/inventories in that section of the value chain under their control and methods of reducing/eliminating them
- skill gap analysis and methods of filling skill gaps
- principles of the manufacturing process relevant to the section/team
- production data generated by the process and its application to JIT.

## 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.

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| <b>Overview of assessment requirements</b>                                                                               | The person will at all times know the state of the JIT system in their area and will take actions to ensure its smooth operation on a day to day basis as well as recommend/undertake actions to improve it long term.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>What critical aspects of evidence are required to demonstrate competency in this unit?</b>                            | Evidence should be available of the person's facilitation of the operation of the JIT system and their making of recommendations for/making improvements                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>In what context should assessment occur?</b>                                                                          | This unit will need to be assessed in an organisation operating JIT.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Are there any other units which could or should be assessed with this unit or which relate directly to this unit?</b> | <p>This unit is related to:</p> <ul style="list-style-type: none"> <li>• <i>MSACMT221A Apply Just in Time (JIT) procedures</i>, and</li> <li>• <i>MSACMT621A Develop a Just in Time (JIT) system</i> which cover the lower and higher skill levels in CMI respectively.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>What method of assessment should apply?</b>                                                                           | <p>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.</p> <p>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.</p> <p>The assessee will have access to all techniques, procedures, information, resources and aids which would normally be available in the workplace.</p> <p>The method of assessment should be discussed and agreed with the assessee prior to the commencement</p> |

| <b>EVIDENCE GUIDE</b>                                                         |                                                                                                                                         |
|-------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
|                                                                               | of the assessment.                                                                                                                      |
| <b>What evidence is required for demonstration of consistent performance?</b> | Evidence should be gathered from an extended period showing routine support for the JIT system and regular improvements made/suggested. |
| <b>What are the specific resource requirements for this unit?</b>             | Access to an organisation using JIT.                                                                                                    |

## 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.

#### Just in time (JIT)

Just in time (JIT) is a production scheduling concept that calls for any item needed at a production operation - whether raw material, finished item, or anything in between, to be produced and available precisely when needed, neither a moment earlier nor a moment later.

#### Kanban

Kanban is a card or sheet used to authorise production or movement of an item; when fully implemented, kanban (the plural is the same as the singular) operates according to the following rules:

- all production and movement of parts and material take place only as required by a downstream operation, i.e. all manufacturing and procurement are ultimately driven by the requirements of final assembly or the equivalent
- the specific tool which authorizes production or movement is called a kanban. The word literally means card or sign, but it can legitimately refer to a container or other authorizing device. Kanban have various formats and content as appropriate for their usage (e.g. a kanban for a vendor is different than a kanban for an internal machining operation).

Kanban is typically applied to batch type operation and the production is measured in units produced. In continuous manufacturing organisations, production is measured in terms of production rate (e.g. kg/h, tonne/day) and rate is increased/decreased according to the flow authorisation which may be a kanban (e.g. ticket, order from a supplier) or may be a SCADA signal from a remote facility (e.g. customer tank) saying that resupply is required or similar.

#### 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

| <b>RANGE STATEMENT</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
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|                        | make control decisions and/or give required information personnel for action.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Key measures</b>    | Key measures may include inventory levels, lead time, IFOTIS delivery, productivity/production rate, other measures of pull through the value chain, quality.<br><br>IFOTIS refers to delivery of product In Full, On Time and In Specification.                                                                                                                                                                                                                                                                                                                   |
| <b>Quick fix</b>       | Quick fix is action taken to immediately and cheaply control a problem, prevent it getting worse and/or ameliorate its impact, but which does not necessarily solve it long term.                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Pull system</b>     | Pull is a system of making to demand rather than for stock or to a forecast.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Value chain</b>     | 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)

|                    |          |
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| <b>Unit Sector</b> | CM Tools |
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## corequisite units

|                          |  |
|--------------------------|--|
| <b>Corequisite units</b> |  |
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## Functional area

| Functional Area |  |
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|-----------------|--|