



Australian Government

MEM30021 Prepare a simple production schedule

Release: 1

MEM30021 Prepare a simple production schedule

Modification History

Release 1. Supersedes and is equivalent to MEM30021A Prepare a simple production schedule.

Application

This unit of competency defines the skills and knowledge required for the scheduling of production that involves several interconnected manufacturing processes. It relates to the preparation of a schedule for the manufacture of a single component or single assembly function or to operations for a single small production work unit or production cell. The schedule involves only a small number of constraints or variables.

Where skills are required to determine steps in a manufacturing process unit MEM30018 Undertake basic process planning should also be selected.

The unit applies to manufacturing production or related activities and is suitable for people giving technical support in manufacturing or engineering operations and those pursuing technical qualifications and careers at paraprofessional or technician level. All work is carried out under supervision.

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

Pre-requisite Unit

Nil

Competency Field

Engineering technician

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify production requirements	1.1 Follow standard operating procedures (SOPs) and comply with work health and safety (WHS) requirements at all times 1.2 Identify the production processes to be used from instructions and specifications provided 1.3 Obtain customer requirements in terms of volume, quality, delivery time and arrangements from supervisor or other appropriate sources

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.4 Analyse customer and process requirements to determine production requirements
2. Develop an activity plan	2.1 Divide production requirements into activity elements 2.2 Construct a network diagram that reflects activities 2.3 Determine the critical path 2.4 Determine the latest start, earliest finish and slack time for activity elements to meet requirements 2.5 Obtain assistance and approval from supervisor
3. Prepare the production schedule	3.1 Prepare a production schedule 3.2 Prepare a bill of materials to assist in control of materials 3.3 Depict schedule using a Gantt chart or similar graphical display 3.4 Ensure schedule allows for future changes to improve performance 3.5 Obtain assistance and approval from supervisor
4. File and issue the schedule	4.1 Review and test the schedule with appropriate personnel 4.2 Refer the schedule to appropriate personnel for implementation 4.3 Provide all supporting documents for implementation 4.4 File and issue the schedule in accordance with SOPs

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.

Production requirements	- the production processes to be used - machine availability and capability
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include:	• inventory requirements • procurements • supply capacities • contingency analysis.
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Unit Mapping Information

Release 1. Supersedes and is equivalent to MEM30021A Prepare a simple production schedule.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b7050d37-5fd0-4740-8f7d-3b7a49c10bb2>

Assessment Requirements for MEM30021 Prepare a simple production schedule

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Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include:

- identifying production requirements
- developing an activity plan of production requirements on at least two occasions
- preparing the production schedule on at least two occasions
- filing and issuing the schedule.

Note: Where a volume and/or frequency is not specified, demonstration must be provided at least once.

Knowledge Evidence

Evidence required to demonstrate the required knowledge for this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include knowledge of:

- types of production including:
 - jobbing production
 - batch production
 - process production
- just- in-time (JIT) procedures
- cellular manufacture
- scheduling
- interpreting customer requirements
- machine capability and selection
- Gantt charts
- contingency plans
- project planning techniques at an introductory level
- program evaluation and review technique (PERT) and critical path methods (CPM) diagrams at an introductory level
- critical path networks at an introductory level
- hazards and control measures associated with preparing a simple production schedule, including housekeeping.

Assessment Conditions

- Assessors must:
 - have vocational competency in preparing a simple production schedule at least to the level being assessed with relevant industry knowledge and experience
 - satisfy the assessor requirements in the Standards for Registered Training Organisations 2015 or its replacement and comply with the National Vocational Education and Training Regulator Act 2011, its replacement or equivalent legislation covering VET regulation in a non-referring state/territory as the case requires.
- Where possible, assessment must occur in operational workplace situations. Where this is not possible or where personal safety or environmental damage are limiting factors, assessment must occur in a sufficiently rigorous simulated environment that reflects realistic operational workplace conditions that cover all aspects of workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required including relevant workplace procedures, product and manufacturing specifications.
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

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