



Australian Government

MEM30018 Undertake basic process planning

Release: 1

MEM30018 Undertake basic process planning

Modification History

Release 1. Supersedes and is equivalent to MEM30018A Undertake basic process planning.

Application

This unit of competency defines the skills and knowledge required to undertake a basic determination of process specifications and production sequence for a manufacturing operation. The unit applies to a range of processes in manufacturing and a stage of the overall production process. It does not apply to interfacing between processes.

Where interfacing between manufacturing processes is required unit MEM30021 Prepare a simple production schedule should be selected.

The process plan is developed over a specified timeframe taking into account resources available and required. The process plan establishes detailed steps required and milestones against which progress can be checked.

Performance of this unit would normally be conducted in a work environment where the basic process plan is reviewed by supervisors, planners or other internal review procedures before the plan is implemented.

The unit applies to engineering 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. Assist in determination of a	1.1 Follow standard operating procedures (SOPs) and comply with work health and safety (WHS) requirements at all times

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
process sequence	1.2 Undertake a basic analysis of process specifications using relevant job instructions, drawings, cost objectives, and operational procedure 1.3 Prepare a process sheet based on analysis that includes operation sheets, sketches, tooling, equipment schedules and gauges 1.4 Clearly document the process steps and approvals required 1.5 Identify flow chart requirements and produce charts based on analysis 1.6 Prepare material and parts lists for the production process based on analysis 1.7 Determine tooling and/or equipment requirements in conjunction with supervisor and other expert personnel 1.8 Document all requirements in accordance with SOPs
2. Submit new or revised process documents	2.1 Prepare new or revised process documents 2.2 Submit new or revised operation requirements 2.3 Issue approved process documents to relevant personnel 2.4 Catalogue and store approved drawings and or parts lists

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.

Process documents include:	- operation sheets - flow charts - parts lists - drawings.
Operation or process sheet	sketches

includes:	• tooling • equipment schedules • gauges.
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Unit Mapping Information

Release 1. Supersedes and is equivalent to MEM30018A Undertake basic process planning.

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 MEM30018 Undertake basic process planning

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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:

- assisting in the determination of a process sequence on at least two occasions
- preparing and submitting new or revised process documents on at least two occasions
- issuing and filing approved process documents.

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 process documents
- operation or process sheets and their inclusions
- product and process manufacturing principles including:
 - flow
 - elaborate transformation
 - value adding
 - waste
 - hazard identification and reduction
 - safe work practices and procedures.

Assessment Conditions

- Assessors must:
 - have vocational competency in undertaking basic process planning 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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