



Australian Government

Department of Education, Employment and Workplace Relations

MEM30021A Prepare a simple production schedule

Release: 1

MEM30021A Prepare a simple production schedule

Modification History

Not Applicable

Unit Descriptor

Unit descriptor	This unit covers preparing a simple production schedule in manufacturing. For skills associated with determining steps in manufacturing process see Unit MEM30018A (Undertake basic process planning).
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Application of the Unit

Application of the unit	<p>This unit applies to all manufacturing and engineering workplace environments. It covers the scheduling of production that involves several interconnected manufacturing processes.</p> <p>All work is carried out under supervision.</p> <p>Band: 0</p> <p>Unit Weight: 0</p>
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Licensing/Regulatory Information

Not Applicable

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	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. Identify production requirements	1.1. The production processes to be used are identified from instructions and specifications provided. 1.2. Customer requirements in terms of volume, delivery time and arrangements and quality are obtained from supervisor or other appropriate sources. 1.3. Customer and process requirements are analysed to determine production requirements.
2. Develop an activity plan production requirements	2.1. Production requirements are divided into activity elements. 2.2. A network diagram is constructed. 2.3. The critical path is determined. 2.4. The latest start/earliest finish and slack time are determined for activity elements to meet requirements. 2.5. Assistance and approval from supervisor is obtained.
3. Prepare the production schedule	3.1. A production schedule is prepared which lists: <ul style="list-style-type: none"> 3.1.1. customer requirements 3.1.2. time constraints 3.1.3. production requirements 3.1.4. machine availability and capability 3.1.5. inventory requirements 3.1.6. procurements 3.1.7. supply capacities 3.1.8. contingency analysis. 3.2. A simple bill of materials required is prepared to assist in control of materials. 3.3. Schedule is depicted using a Gantt chart or similar graphical display. 3.4. Schedule allows for future changes to improve performance. 3.5. Assistance and approval from supervisor is obtained.
4. File and issue the schedule	4.1. The schedule is reviewed and tested with appropriate personnel. 4.2. The schedule is referred to appropriate personnel for implementation. 4.3. All supporting documents are provided for implementation. 4.4. The schedule is filed/issued according to workplace

ELEMENT	PERFORMANCE CRITERIA
	procedures.

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

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

Required skills

Look for evidence that confirms skills in:

- prioritising
- communicating
- managing time
- organising
- documenting
- using project management tools
- analysing
- calculating
- reading, interpreting and following information on written job instructions, specifications, standard operating procedures, charts, lists, drawings and other applicable reference documents
- planning and sequencing operations
- checking and clarifying task-related information

Required knowledge

Look for evidence that confirms knowledge of:

- basic knowledge of:
 - types of production
 - jobbing production
 - batch production
 - process production
 - Just in Time procedures
 - cellular manufacture
 - scheduling
 - interpreting customer requirements
 - machine capability and selection
 - Gant charts

REQUIRED SKILLS AND KNOWLEDGE

- contingency plans
- introduction to project planning techniques
- introduction to PERT/CPM diagrams
- introduction to critical path networks
- hazards and control measures associated with preparing a simple production schedule, including housekeeping
- safe work practices and procedures

Evidence Guide

EVIDENCE GUIDE	
<p>The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.</p>	
Overview of assessment	A person who demonstrates competency in this unit must be able to prepare a simple production schedule.
Critical aspects for assessment and evidence required to demonstrate competency in this unit	Assessors must be satisfied that the candidate can competently and consistently perform all elements of the unit as specified by the criteria, including required knowledge, and to be capable of applying the competency in new and different situations and contexts.
Context of and specific resources for assessment	<p>This unit may be assessed on the job, off the job or a combination of both on and off the job. Where assessment occurs off the job, that is the candidate is not in productive work, then an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by an individual working alone or as part of a team. The assessment environment should not disadvantage the candidate.</p> <p>This unit could be assessed in conjunction with any other units addressing the safety, quality, communication, materials handling, recording and reporting associated with preparing a simple production schedule, or other units requiring the exercise of the skills and knowledge covered by this unit.</p>
Method of assessment	Assessors should gather a range of evidence that is valid, sufficient, current and authentic. Evidence can be gathered through a variety of ways including direct observation, supervisor's reports, project work, samples and questioning. Questioning techniques should not require language, literacy and numeracy skills beyond those required in this unit of competency. The candidate must have access to all tools, equipment, materials and documentation required. The candidate must be permitted to refer to any relevant workplace procedures, product and manufacturing specifications, codes, standards, manuals and reference materials.
Guidance information for assessment	

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.

Simple production schedule

- Applies 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 will involve only a small number of constraints or variables

Unit Sector(s)

Unit sector	
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Co-requisite units

Co-requisite units	

Competency field

Competency field	Engineering technician
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