



Australian Government

PMBPROD385E Program computer-controlled equipment

Release: 1

PMBPROD385E Program computer-controlled equipment

Modification History

Release 1. Unit code and title changed. Application changed. Elements and Performance Criteria changed. Range of Conditions removed. Assessment Requirements changed. Supersedes and is equivalent to PMBPROD385 Program computer controlled equipment.

Application

This unit describes the skills and knowledge required to program computer-controlled equipment or processes typically used for moving, cutting or joining systems.

This unit applies to an experienced technician working alone or as part of a team.

The unit principally refers to the programming of generally available automation and quasi-robotic assistance devices for moving, cutting, joining, and pick and place systems.

No licensing or certification requirements exist at the time of publication. Relevant legislation, industry standards and codes of practice within Australia must be applied.

Pre-requisite Unit

Nil.

Competency Field

Production – Plastic Fabrication, Robotic Assistance Devices

Elements and Performance Criteria

Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
1. Determine operational parameters	1.1 Identify work requirements from engineering drawings and product specifications 1.2 Define basic machine function and tool path geometry requirements to meet job specifications 1.3 Select program elements for machine controller that meet job specifications
2. Write program	2.1 Calculate coordinates for simple tool path or basic machining functions based on job specifications 2.2 Write program in standard code format to meet job specifications 2.3 Produce accurate operation sheets that reflect job specifications

Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
3. Check program	3.1 Operate machine in manual mode to test, prove and adjust program to meet job specifications 3.2 Check component output meets job specifications 3.3 Record program operating audit report according to workplace procedures
4. Anticipate and solve process control variances	4.1 Recognise existing or potential process control variances and their causes 4.2 Determine, prioritise and implement remedial and preventative actions based on identified issues and causes 4.3 Monitor process control variances and corrective actions taken until resolved 4.4 Accurately maintain records and logbooks

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance.

- Numeracy skills to interpret engineering and equipment specifications.
- Reading skills to interpret job and equipment specifications and workplace procedures.
- Writing and oral communication skills to record operation sheets and report on process control variances.

Other foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Unit Mapping Information

Supersedes and is equivalent to PMBPROD385 Program computer controlled equipment.

Links

Companion Volume implementation guides are found in VETNet – -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=932aacef-7947-4c80-acc6-593719fe4090>

Assessment Requirements for PMBPROD385E Program computer-controlled equipment

Modification History

Release 1. Unit code and title changed. Application changed. Elements and Performance Criteria changed. Range of Conditions removed. Assessment Requirements changed. Supersedes and is equivalent to PMBPROD385 Program computer controlled equipment.

Performance Evidence

There must be evidence the candidate has completed the tasks outlined in the elements and performance criteria of this unit, and demonstrated the ability to:

- program computer-controlled equipment at least once to meet job specifications.

Knowledge Evidence

There must be evidence the candidate has knowledge of:

- software program function in controlling the operation
- types of computer-controlled equipment and their applications
- program and machine theory, practices and techniques
- the tool paths to be followed when producing a part or product
- the sequence of machining operations
- the reasons for selecting tool paths and sequence of operations
- the zero point of the equipment
- procedures for writing programs in standard code format
- procedures for completing operation sheets
- the information to be included in operation sheets
- key variables that may affect product quality and production output
- typical and atypical process and product problems, including early warning signs, possible causes and corrective actions
- organisational procedures relevant to the work environment or job role.

Assessment Conditions

Skills must have been demonstrated in the workplace or in a simulated environment that reflects workplace conditions and contingencies.

Assessors must satisfy the NVR/AQTF mandatory competency requirements for assessors.

Links

Companion Volume implementation guides are found in VETNet – -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=932aacef-7947-4c80-acc6-593719fe4090>

