

Unit of Competency CPCCJN3002 Use computer-controlled machinery

Application

This unit of competency specifies the skills and knowledge required to program, load and operate computer-controlled machinery for the production of components, meeting all relevant requirements of Australian Standards, work health and safety (WHS), and Commonwealth and state or territory legislation.

The unit includes using computer-controlled machinery for multiple production processes or designed finishes with manufacturing applications in shopfitting, joinery and stair-building work.

Completion of the general construction induction training program specified by the model Code of Practice for Construction Work is required for any person who is to carry out construction work. Achievement of *CPCCWHS1001 Prepare to work safely in the construction industry* meets this requirement.

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

Prerequisite Unit

CPCCWHS2001 Apply WHS requirements, policies and procedures in the construction industry.

Elements and Performance Criteria

1. Plan and prepare.	1.1	Read and interpret work instructions and plan sequence of work.
	1.2	Plan all work to comply with laws and regulations, Australian Standards, work health and safety (WHS) and environmental requirements, manufacturers' specifications, workplace requirements, drawings and specifications.
	1.3	Select tools and equipment, check for serviceability and report any faults.
	1.4	Select and use personal protective equipment (PPE) for each part of the task.
	1.5	Inspect work site, assess hazards and apply risk controls, including required signage and barricades.
	1.6	Select materials required for task, handle safely and prepare and position ready for use.
2. Input data and adjustments into computer numerical control (CNC) machinery.	2.1	Determine programming methods for task requirements and machine specifications.
	2.2	Edit computer program to produce straight and circular tool movements, compensating for tool profiles.
3. Transfer program into machine memory and operate machine.	3.1	Determine methods of transferring program into machine memory.
	3.2	Load program into machine memory using acceptable method.
	3.3	Test program operations through dry-run/simulation mode.
	3.4	Produce specified work piece using automatic mode.
4. Clean up.	4.1	Clean up, meeting all legislative and workplace requirements for safety, waste disposal and materials handling.
	4.2	Check, maintain and store plant, tools and equipment and report any faults.

Foundation skills

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

Unit Mapping Information

Supersedes is and equivalent to CPCCJN3002A Use computer-controlled machinery.

Links

Companion Volume Implementation Guide:

<https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=7e15fa6a-68b8-4097-b099-030a5569b1ad>

Assessment Requirements for CPCCJN3002 Use computer-controlled machinery

Performance Evidence

To demonstrate competency, a candidate must meet the performance criteria of this unit by producing two different components using computer-controlled machinery:

- from at least two of the following materials:
 - acrylics
 - aluminium
 - medium density fibreboard (MDF)
 - particle board
 - melamine-faced material
 - plywood
 - timber
- using at least two of the following program operations:
 - boring
 - cutting
 - forming and shaping
 - milling
 - sculpting.

Knowledge Evidence

To be competent in this unit, a candidate must demonstrate knowledge of:

- compliance requirements of Australian Standards relevant to using computer-controlled machinery
- workplace quality policies and standards relevant to using computer-controlled machinery
- safety requirements for using computer-controlled machinery
- type, range and characteristics of materials used with computer-controlled machinery:
 - acrylics
 - aluminium
 - medium density fibreboard (MDF)
 - particle board
 - melamine-faced material
 - plywood
 - timber
- application of software used to operate specific computer-controlled machinery:
 - boring
 - cutting
 - cutting and polishing
 - forming and shaping
 - milling
 - sculpting

- measuring techniques used in computer-controlled machinery
- types and uses of computer-controlled machinery.

Assessment Conditions

Assessors must meet the requirements for assessors contained in the Standards for Registered Training Organisations.

This unit must be assessed in the workplace or a close simulation using realistic workplace conditions and standards, materials, activities, responsibilities, procedures, safety requirements and environmental considerations.

Links

Companion Volume Implementation Guide:

<https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=7e15fa6a-68b8-4097-b099-030a5569b1ad>