Title	Use CAM software to develop and test a program for a CNC machine to produce furniture components
Level	4	Credits	12

Purpose	People credited this unit standard are able to: use CAM software to develop a program for a CNC machine to produce furniture components; and test run a program for a CNC machine.

Classification	Furniture > Furniture and Cabinet Making

Available grade	Achieved

Guidance Information

1   Assessment information
    This unit standard must be assessed against on-job.
    All activities and performance criteria must be carried out in accordance with worksite policies and procedures.

2   For the purpose of this unit standard, the CAM can be programmed at the machine or at a remote computer.

3   Definitions
    CAM refers to computer aided machinery.
    CNC machine refers to computer numerical controlled machine.
    Worksite policies and procedures refer to documented policies and to documented or other directions provided to staff. These may include, but are not limited to, ways of managing health and safety, environmental considerations, quality, and production, and must conform to legislation. Examples include standard operating procedures, company health and safety plans, on-site briefings, and supervisor's instructions.

Outcomes and performance criteria

Outcome 1

Use CAM software to develop a program for a CNC machine to produce furniture components.

Performance criteria

1.1   Component drawing is obtained.

1.2   Panel dimensions are entered in accordance with component drawing to create plan.

1.3	Program is named in accordance with component drawing.

1.4	Cut-out dimensions are programmed and contour lines match component drawing.

1.5	Router is selected in accordance with machine tooling plan and panel thickness.

1.6	Tooling path, direction and rotation of router is selected to ensure compensation matches component contour lines.

1.7	Distance of boring holes from zero point and the number of holes to be drilled are programmed in accordance with component drawing.

1.8	Drill diameter and hole depths are programmed in accordance with component drawing.

1.9	Component program is saved.

Outcome 2

Test run a program for a CNC machine.

Performance criteria

2.1	Program is uploaded to the machine.

2.2	Tooling is checked and confirmed to be in accordance with component drawing.

2.3	Machine is run to produce test component.

2.4	Test component is in accordance with job specifications.

Replacement information	This unit standard replaced unit standard 2251.

Planned review date	31 December 2024

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	19 June 2009	N/A
Review	2	10 December 2020	N/A

Consent and Moderation Requirements (CMR) reference	0173

This CMR can be accessed at http://www.nzqa.govt.nz/framework/search/index.do.

Comments on this unit standard

Please contact Competenz qualifications@competenz.org.nz if you wish to suggest changes to the content of this unit standard.