NORTHERN COLLEGE OF THE ARTS & TECHNOLOGY

22470VIC Certificate II in Engineering Studies

NATIONALLY RECOGNISED TRAINING

Course Information Brochure

Description of Course

This is a project-based, hand-on course delivered in a simulated workplace environment in a fully-equipped workshop. The course provides students with the skills and knowledge to pursue an apprenticeship in the engineering trades or with a foundation for professional engineering roles. Units 1 & 2 cover areas in computer technology and using hand and power tools.

We deliver a general qualification including some elective units from fabrication, machining and engineering technical pathways. Units 3 and 4 offers scored assessment and incorporates units such as producing basic engineering sketches and drawings, handling engineering materials, performing computations (for the VCE stream only).

Activities/task

Projects made in Units 1 & 2 include vice soft jaws, sheet metal tool caddy, centre punch, soft face mallet and an engineer's square. Students doing Units 3 & 4 are required to construct a major project and document the project in a portfolio.

Assessment

Students wishing to receive a study score for 22470VIC Certificate II in Engineering Studies can undertake scored assessment.

Units of competency are assessed through observation of practical skills and completing written assessments. Students will be given a fair and adequate assessment process with multiple opportunities to demonstrate competency.

The assessment of your overall competence will be undertaken by a qualified assessor and your competence judged using the criteria stated in the qualification.

Students must attend 80% of all classes and successfully complete all units of competency to obtain their certificate II qualification.

Eligibility and Prerequisites

Year 9 - 10 basic language, literacy and numeracy levels are desired. The VCE VET Engineering Program satisfies the eligibility requirement for the Industry Specific Skills and Work Related Skills Strand. If you have any individual needs please contact us to discuss the options available to you.

Course Content

Units 1 & 2

Core

MEM13014A	Apply principles of Occupational Health and Safety in a work environment
MEM18001C	Use hand tools
MEM18002B	Use power tools/hand held operations
VU22329	Report on a range of sectors in the manufacturing, engineering and related industries
VU22330	Select and interpret drawings and prepare three dimensional (3D) sketches and drawings
VU22331	Perform basic machining processes
VU22332	Apply basic fabrication techniques
VU22339	Create engineering drawings using computer aided systems

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Units 3&4

Core Units

MEMPE006A	Undertake a basic engineering project

Electives

VU22333	Perform intermediate engineering computations (VCE compulsory)
VU22334	Produce basic engineering components and products using fabrication or machining
VU22335	Perform metal machining operations (VCAL only)

Benefits of this training

This course offers a VCE study score in year 12 through scored assessment which can contribute directly to the ATAR as one of a student's primary four scaled studies or as the fifth or sixth study. The VCE VET Engineering Program is available for students who are enrolled in the VCAL program. The contribution of the VCE VET Engineering program to a student's VCAL program is determined by the number of units of competency successfully completed.

Pathways

This certificate provides training and pathways in the engineering, manufacturing or other related industries. The manufacturing sector encompasses a broad range of industries including automotive components, advanced electronics and machinery, aerospace and aviation, defence, chemicals, and plastics, pharmaceuticals, fabricated metals, textiles, clothing and footwear (TCF) and food processing.

Apprenticeships and traineeships can lead into a range of careers in design, manufacture, installation and repair of a wide range of equipment and machinery. As a qualified tradesperson, occupations include boilermaker, welder, toolmaker/die maker, hydraulics, avionics or mechanical technician, draftsperson and mechanical fitter and fitter and machinist. Fitter and machinist are in very high demand across Australia.

There are pathways into professional careers in the engineering industry such as a mechanical engineer, electrical engineer and surveying.

Course Fees

VET students from other schools have fee arrangements with their own schools for course costs. All training resources are provided when classes commence. NCAT students please see the Payment Form – Material Charges.

For safety reasons there is a NCAT uniform which is not included in the materials cost. Parents will receive a letter outlining specific details of the uniform and the supplier.

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Length of the Course

Students in Year 10, VCAL or VCE programs will complete the course over two years one half day per week. An 80 hours structured work placement is a requirement of the course. Full time NCAT students may complete the course in a year as part of the VCAL Pre-apprenticeship program.

Enrolment Process

Students enrolling as full time students must contact the college on Tel 9478 1333 for an interview. External students apply through their home school VET coordinator and complete the enrolment form at the NCAT information evening.

Please note

For details regarding Access, Equity, Privacy Policy, Refunds Policy, Student Conduct, Recognition Processes, Access to Records, Complaints & Appeals Policy etc. please see the VET & General Student Handbook available on the NCAT website.

RTO Number 6736