MECHANICAL ENGINEERING

NATIONAL CERTIFICATE (VOCATIONAL) ENGINEERING AND RELATED DESIGN LEVEL 2 – 4
Athlone Campus (Motor, Diesel) | Thornton Campus (Sheetmetal, Welding, Boiler Making, Fitting & Turning)

The NC(V) Engineering and Related Design course caters for a wide range of career opportunities for students who would like to become qualified artisans within the mechanical engineering sector. The prospective students will be exposed to a wide range of mechanical engineering subjects. The academic programme integrates the theoretical principles and the practical experience to form a holistic understanding of mechanical engineering. Students are thus prepared to fit into the activities and processes that are expected in the real world of work.

Students that successfully complete the Level 4 qualification may seek employment opportunities in his/her field of study. Students who wish to further their academic studies may advance to the N4-N6 Mechanical Engineering courses or apply to other Higher Education institutions such as a University of Technology.

Career Options

What will I be qualified as once I’ve completed this course?

- Auto Electrician
- Diesel Mechanic
- Motor Mechanic
- Tool Maker
- Fitter (e.g. Maintenance Fitter, Marine Fitter, Hydraulic Fitter, etc.)
- Boilermaker
- Fitter & Turner
- Sheetmetal Worker
- Welder

In which industries will I be able to work?

- Aerospace industry
- Mining industry
- Petrol and chemical industry
- Motor vehicle maintenance and manufacturing
- Manufacturing industry
- Packaging industry
- Printing industry

What could I do to further improve my skills and my chances of furthering my career?

By achieving the NC(V) Level 4 qualification in Engineering and Related Design, you may continue studying at an FET College to obtain your N-Diploma by completing the N4-N6 Certificates. Students may also apply to further their studies at an institution of Higher Education, such as a University of Technology or a University.

Programme Structure

What will I be studying during this course?

LEVEL 2 – 4 FUNDAMENTAL SUBJECTS (COMPULSORY)

- English
- Life Orientation
- Mathematics

LEVEL 2 VOCATIONAL CORE SUBJECTS

- Engineering Fundamentals
- Engineering Systems
- Fitting & Turning OR Automotive Repairs & Maintenance OR Engineering Fabrication (Welding, Boiler Making, Sheetmetal Work) OR Physical Science (Choose one of these to specialise in)
- Engineering Technology
LEVEL 3 VOCATIONAL CORE SUBJECTS

- Engineering Practice & Maintenance
- Material Technology
- Engineering Graphics & Design (CAD)
- Fitting & Turning OR Automotive Repairs & Maintenance OR Engineering Fabrication (Welding, Boiler Making, Sheetmetal Work) OR Physical Science (choose one of these to specialise in, following on from your choice in Level 2)

LEVEL 4 VOCATIONAL CORE SUBJECTS

- Engineering Processes
- Professional Engineering Practice
- Applied Engineering Technology
- Fitting & Turning OR Automotive Repairs & Maintenance OR Engineering Fabrication (Welding, Boiler Making, Sheetmetal Work) OR Physical Science (Choose one of these to specialise in, following on from your choice in Level 2)

Admission Requirements

- Level 2 – Grade 9 or Level 1
- Level 3 – Level 2 qualification
- Level 4 – Level 3 qualification

You must have passed the following subjects at school:

- Mathematics
- English

Duration

- 3 years full-time (1 year per level)
- Enrolment in January

(Part-time - Not available)