

# T Level in Design and Development for Manufacturing and Engineering



Course Level: Level 3

Campus: Newcastle

Subject Type: Construction & Engineering

## Course Overview:

Explore the intricate relationship between design, manufacturing, and engineering.

Delve into essential mathematical concepts crucial for engineering and manufacturing success. Understand materials processing techniques, their impact on product quality, and develop a keen sense of business awareness to navigate the commercial landscape effectively.

## What's Covered:

The world of engineering is fast-paced and ever-changing with an array of exciting opportunities available for aspiring engineers. Studying this pathway aims to develop your understanding of engineering disciplines and you will have the opportunity to work directly within the engineering industry on your work placement.

**The T-Level Engineering programme gives in-depth technical skills development with Year One encompassing all aspects of 'Core Engineering' including:**

- Mechanical and Electrical Engineering
- Mechatronics
- Business, finance and commercial
- Continuous improvement
- Maths and science
- Digital engineering systems

As part of your studies, you will be expected to undertake a work placement to enhance and develop not only your education of the industry, but also to gain valuable industrial training with your employer placement. This work placement opportunity can be achieved using a range of options, and is subject to the employer's requirements. The placement can be achieved using a block placement or day release. Employers are keen to engage and train students in engineering due to the skills gaps in the industry.

You will continue with your work placement alongside planning, designing and managing an employer set engineering project. In college you will be able to specialise in Design Engineering and you will have access to the latest specialist technical equipment to help you to stand out from the crowd.

## Entry Requirements:

As a condition of being offered a place on this course, you would be expected to meet the following entry requirements:

1. Submit a school report showing your attendance, behaviour and effort details
2. Attend the Department Experience Day in June 2025

**100%**

pass rate in 2024

**Top FE  
College**

3. Complete a summer assignment which would be set on Experience Day in June 2025.

4. You will need to achieve/have achieved 5 GCSEs at grade 5 or above which must include Maths, English Language and Science.

#### **Assessment Information:**

You will be assessed through a combination of exams, coursework, work based observations, an employer project and an end point assessment.

#### **Fees and Financial Support:**

**This course is free for anyone aged 16 – 18.**

#### **College Maintenance Allowance (CMA):**

Anyone with a gross household income under £30,000 can receive financial support to cover college related costs such as transport, meals, course equipment and uniform. Bursary support is based on individual circumstances and will be allocated to best suit your individual needs. A range of other financial support is available depending on your personal circumstances. For more details visit [nscg.ac.uk/finance](https://nscg.ac.uk/finance)

#### **Progression:**

This course will prepare you for a career in design and development for engineering. Upon successful completion of the course, you may consider a career as a Design Engineer.

The Royal Academy of Engineering, Siemens, Autodesk CAD and the Ministry of Defence are a few of the many top organisations who have validated this Level 3 two-year programme for 16-19 year olds. On completion, students can progress onto Higher Technical qualifications at Level 4 and 5, Higher Apprenticeships or degrees up to Level 6.

## **How do I find out more?**

To find out more, please contact the Engineering and Construction Admin team on 01782 254315.