







Level 3

# Design and Development for Engineering & Manufacturing

T Level



				
<b>Duration</b>	<b>Location</b>	<b>Starting</b>	<b>Age</b>	<b>Careers</b>
2 years	Rush Green Campus	Sept 2025	16-18	Engineering Construction Design & Site Management

## Course fees per year

AGE 16-18

**FREE**

Contact us to discuss what Financial support is available.

## Overview

If you're interested in a career in design and development for engineering and manufacturing then this course is for you!

This 2-year course will develop a broad understanding of the sector, including material properties, business, commercial and financial awareness and essential mathematics for engineering and manufacturing to ensure you have the key skills employers will demand when you enter the industry.

As with any T Level, this course includes a minimum 9 weeks experience working with an employer on an industry placement.

# T-LEVELS

THE NEXT LEVEL QUALIFICATION

## What you'll learn

You will develop an understanding of a broad range of issues relevant to the sector, including:

- working within the Engineering and Manufacturing Sectors – an understanding of how materials, conditions and context influence design processes and products
- essential mathematics for engineering and manufacturing – a knowledge and understanding of mathematics including standard matrices and determinants and standard trigonometry
- materials and their properties – understanding material processing techniques and their effects on materials and material quality, the condition of materials, how these are managed, and materials testing methods and techniques
- business, commercial and financial awareness - basic commercial principles including commercial priorities and markets, customers/clients/partners and resource allocation

In addition to the core content, you will also complete at least one module of occupation-specific content.

You'll study core elements in Year 1, followed by specialisms in Year 2.

**Specialisms are either in Electrical and Electronic Engineering or Control and Instrumentation.**

## Assessments / Exams

You will be assessed through a mix of practical and written assignments and presentations to demonstrate your understanding. You will also need to successfully complete your industry placement.

## Entry requirements

You will need to have GCSE Maths at grade 5 or above, English Language at grade 4 or above, and two additional subjects at grade 4 or above.

## Our teaching staff

You will be taught by our industry-experienced staff, who are passionate about ensuring our students reach their full potential.

## What this course leads to

This course is suitable for anyone interested in a career in design and development for engineering and manufacturing.

Career options might include working as a mechanical design engineer or manufacturing design engineer.

You can also use this T Level to progress to a related higher-level apprenticeship or course of study at a higher level.

Visit this course on our website: <https://barkingdagenhamcollege.ac.uk/find/courses/0000011435>

For further information please contact the college: <https://barkingdagenhamcollege.ac.uk/contact>