

# ENGINEERING AND MANUFACTURING DESIGN AND DEVELOPMENT FOR ENGINEERING AND MANUFACTURING – T-LEVEL (ENGINEERING AND MANUFACTURING) – LEVEL 3

START DATE: 2 September 2024 LENGTH: 2 years STUDY: Full-Time LOCATION: West Lancashire College QUALIFICATION GAINED: City and Guilds Level 3 T-Level Qualification in Engineering and Manufacturing - Design and Development for Engineering and Manufacturing

# More about the course

On this two-year course you will spend most of your time in college learning the theoretical and practical skills you will need to develop an understanding of a broad range of issues relevant to the sector.

You will be taught by tutors who have years of experience working in the industry and undertake an industry placement with an employer for a minimum of 45 days throughout your course, giving you the chance to put your new skills into practice and be prepared to thrive in the workplace.

## Entry Requirements

- You will ordinarily require a minimum of 5 GCSEs at Grade 5 or above, including English and maths.
- You may also be required to participate in an assessment to ensure suitability ahead of enrolment.

## What will I achieve?

On successful completion of this course, you will achieve a City and Guilds Level 3 T-Level Qualification in Engineering and Manufacturing - Design and Development for Engineering and Manufacturing.





### What will I learn?

You will study the following core modules:

- 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 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.

You will also take the following specialist units:

- Fitting and assembly technologies
- Machining and toolmaking technologies
- Composites manufacturing technologies.

Alongside your studies you will undertake a substantial work experience placement of at least 45 days.

## How is the course taught?

- · Group work
- Practical sessions
- Theory sessions
- Work placement
- Employer-set project (ESP).

## How am I assessed?

- Written examinations
- Practical activities and assessments
- Case study assessment
- Professional discussion
- Employer-set project (ESP).

#### Work Experience opportunities

Work experience is an important part of your T-Level. You will undertake a substantial industry placement with an employer for a minimum of 45 days during your course to help you prepare for your next steps. You will also undertake an employer-set project as part of the course.

#### English and maths

English, maths and digital skills are vital to all roles in engineering and manufacturing, and these are embedded throughout the course to help you prepare for working in the industry.

#### Where can I progress?

On successful completion of this course, you may progress into industry on an apprenticeship or into a variety of entrylevel roles within the engineering and manufacturing sector.

Students with a Level 3 T-Level in Engineering and Manufacturing (Design and Development for Engineering and Manufacturing) have access to a wide range of career opportunities including a Foundation Degree or higher-level study to become an engineer or a manufacturing design engineer, among many other roles in the sector.



