

## General Enquiries

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# T Level Design and Development for Engineering and Manufacturing - Design and Development: Mechanical Engineering

Location	Stockport College
Course Type	College 16-18
Department	Engineering
Start Date	Monday 1st September 2025
Course Code	SFP-EG3T-1400

## Course Overview

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These qualifications are being offered for the first time in 2022/23 and are a technical alternative to A Levels, offering a route to University or an Apprenticeship. The T level is equivalent to 3 A levels and carries the same UCAS points but with the advantage of a minimum 315 hours engineering industry work experience and a significant practical element to the course covering either of the following occupational specialisms.

- Mechanical Engineering
- Electrical & Electronic Engineering

## Course Requirements

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Entry Requirements - GCSE grade 5 in Maths, English and Science and a further 2 GCSE's at grade 4. (if you don't meet the GCSE entry requirements there is an option of a 1 year Foundation T Level course)

## What You Will Learn

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Embarking on the study of T-Level Engineering equips individuals with a multifaceted skill set, integral to navigating the intricacies of the modern engineering landscape. Proficiency in technical drawing and CAD (Computer-Aided Design) is foundational, enabling students to articulate their ideas visually and engage in the design process with precision and innovation.

Practical skills take centre stage, with hands-on experience in workshops and laboratories. T-Level Engineering students cultivate expertise in manufacturing processes, working with a variety of materials and tools. This fosters a deep understanding of how theoretical concepts manifest in real-world applications, a crucial aspect for future engineers.

Problem-solving and critical thinking are honed through project-based learning, where students tackle engineering challenges independently and collaboratively. Effective communication skills are also emphasised, acknowledging the importance of clear articulation and collaboration in the engineering field.

The benefits of T-Level Engineering extend beyond the classroom. Graduates are well-prepared for the workforce, possessing a blend of theoretical knowledge and practical skills highly sought after by employers. Additionally, T-Level qualifications offer a direct pathway to employment or higher education, ensuring a seamless transition for those eager to pursue further studies in engineering or dive into professional roles. The T-Level Engineering curriculum not only imparts technical expertise but also nurtures adaptable and resilient individuals ready to thrive in the dynamic engineering sector.

## Assessment

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Core units and employer set project are externally assessed exams.

Occupational specialisms are internally marked and externally moderated over an extended examination process.

## Progression

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Progression opportunities from a T-Level in engineering can vary depending on your specialisation within engineering and your career goals. T-Levels are designed to provide a strong foundation in technical and practical skills, making you well-prepared for further education and training. Here are some common progression routes you can consider:

Apprenticeships

Higher Education

HNC and HND Programs

Degree Apprenticeship

Professional Certifications and Licensing

Master's Degrees

Ph.D. Programs

Short Courses and Continuing Education

## Career Options

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Completing a T Level in Design and Development for Engineering and Manufacturing, with a focus on Mechanical Engineering, provides you with a robust foundation in engineering principles, design, and manufacturing processes. This qualification is designed to prepare you for both employment and further education in the field of mechanical engineering. Here are some career options and pathways you can explore after completing this T Level:

Junior Mechanical Engineer  
CAD Technician  
Design Engineer  
Product Development Technician  
Manufacturing Technician  
Quality Control/Assurance Technician  
Maintenance Technician  
Project Support Engineer  
Technical Sales Engineer

## Mandatory Units

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Engineering Core subjects such as Maths, Science, Project Management, CAD, Quality  
Employer led Projects

- Essential mathematics for engineering and manufacturing
- Essential science for engineering and manufacturing
- Materials and their properties
- Mechanical principles
- Electrical and electronic principles
- Mechatronics

## Contact Details

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For further information please contact T: 0161 886 7070 or E: [info@trafford.ac.uk](mailto:info@trafford.ac.uk)

## Disclaimer

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Although every care has been taken to ensure that the information contained within this document is accurate, there may be changes to this programme and provision. We will endeavour to keep prospective and current students updated where appropriate and when the information becomes available.