

T Level Engineering and Manufacturing - Mechanical Engineering

Course Overview

We are no longer accepting applications for this course for September 2025 starts. Please take a look at other courses or contact our careers team for independent advice and guidance. Engineered to move you through the essential practical and theoretical skills of mechanics and into the engineering industry, this course is your training ground for a successful career on whatever path you choose. Our T-Level Engineering and Manufacturing - Mechanical Engineering programme has been designed by employers and professional bodies in collaboration with education experts, it gives you the skills the next generation's workforce needs. For 80% of your T level, you work alongside classmates in engaging blended-learning sessions and in purpose-built workshops. You get an in-depth understanding of how the engineering industry works, studying manufacturing techniques, the principles of engineering design and manufacture, and exploring the theories and principles of mechanical engineering. For the remaining 20% of your T level, you step out into an industry placement to put all that learning and theory into practice in a real-world experience – giving you a glimpse at the excitement of the career ahead of you. If you are not quite ready for a T level then a transition programme could be for you. This will give you the chance to improve your maths and English (and any other subjects) to move on to a T level the following year. For more information about transition courses, please visit our T levels course page. If you are aged 16 to 18, you will be enrolled on a study programme. This will include retaking GCSEs or undertaking Functional Skills in English and maths if you haven't already achieved a grade 4 or above. You will take part in activities that help you to develop your personal skills, such as building your character and confidence. This will help you to live well and move into your chosen career.

What you will learn

A year of learning, your first year is a thrilling introduction into the fascinating world of engineering. You move from the ground up, understanding its past, present and future and get an idea of what it means to work in engineering and manufacturing. Notepad and pencil at the ready, you learn about engineering representations and all the essential mathematics and science you'll need every day of your working life. With all those fundamentals in place, you dive into the bits that will truly set you on your way to being a manufacturing engineer:

1. materials and their properties
2. mechanical principles
3. electrical and electronic principles
4. mechatronics
5. engineering and manufacturing control systems

As a course specifically created to build the industry's future, the Engineering Manufacturing T level - mechanical engineering specialism also walks you through key bits of business, so you can step into any team smoothly and with confidence. Including:

1. project and programme management
2. quality management
3. stock and asset management
4. business, commercial and financial awareness
5. health and safety principles and coverage
6. professional responsibilities, attitudes and behaviours
7. continuous improvement

Here we go Time for your design and development (mechanical engineering) specialism to really kick in. This year follows six very clear performance outcomes:

1. Performance outcome 1: Mechanical engineering knowledge criteria
2. Performance outcome 2: Analyse and interpret engineering and manufacturing requirements, systems, processes, technical drawings and specifications
3. Performance outcome 3: Evaluate systems, designs, components and processes, managing and integrating design information, proposals and specifications to develop and improve mechanical engineering and manufacturing proposals and solutions
4. Performance outcome 4: Propose and design mechanical engineering and manufacturing systems, products, components, processes and solutions, considering requirements, constraints and context
5. Performance outcome 5: Collaborate to help manage, develop, test and quality assure mechanical engineering and manufacturing design information, systems, processes and outcomes
6. Performance outcome 6: Communicate proposals, design information and solutions, producing, recording and explaining engineering and manufacturing representations, systems, processes, outcomes, specifications and technical drawings

This year, you also do your industry placement in a position with a firm that really appeals to you and gives you the experience that will most benefit you and your future.

Entry Requirements

T levels are for individuals who are aged 16-18 on or before the 31 August 2024. Standard entry to this course requires one reference. It is desirable that you can demonstrate a minimum of 90% attendance at your last place of work or study. You will also need a GCSE grade 5 in maths, together with 3 further GCSEs at grade 4 including English and science. If you were previously studying at the college, you will need to have attained a Level 2 Diploma in Engineering, plus GCSE English grade 4 and Maths at grade 5. When you enrol, you will be placed on a 6-week Induction period. During this time, we will monitor your attendance, attainment and attitude toward study. At the end of the 6 weeks, we will talk to you about whether you should continue with the T level or whether an alternative course would be better suited to you. If you don't meet these entry requirements but want to start on your chosen career path, then you can apply for the Level 2 EAL Diploma in Engineering Operations during which you will have the opportunity to resit Maths/English GCSE to obtain the necessary entry grades.

Course Fees

Course Details

Course Code	P00036
Start Date	10/09/2024
Study Hours	Full Time
Duration	2 years
Campus	Abbey Park Campus
Level	3

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You are expected to obtain personal protective equipment (PPE) to be worn during all practical sessions. During the Induction period, you will be allocated a locker to store your PPE. Basic requirements are steel toe cap safety boots, and plain navy or black overalls (boiler suit style only). You can purchase your PPE from wherever you wish, however during enrolment you will be given details of some local companies who supply many of our students. The cost of the required PPE would be expected to cost between £30 and £45. You will require some basic stationary (scientific calculator, pens, pencils, ruler, ring binder, page dividers). You will be given a course Equipment List during enrolment, detailing specifics.

Course Progression

Equivalent to three A levels, this T level sets you up for a career in electrical and electronic design and development in the engineering industry, giving you a strong start in a highly sought-after career. You could step into an electrical or electronics design engineer position or go for systems development, measurement and testing – anything involving electrical and electronic systems is open to you from here. It also arms you with the knowledge you need to move into a higher level apprenticeship or a course of study in Higher Education, such as Higher National Diplomas (HNDs) and Degree level courses. Have a chat with our independent careers advisors to work out your next step. They have all the information, advice and guidance you need to spark up your career.

What Happens Next

Apply online via the college website, or if your school uses the Positive Steps @16 (PS16) application system please apply through this and speak to your careers advisor if you are unsure. You will need details of your qualifications, a reference, and a personal statement to complete your application. Once your application has been successfully processed, you will be sent a conditional offer and be invited to a welcome event at the College to meet your tutors, learn more about your chosen course of study and tour the facilities. You will then need to confirm your acceptance of the course offered to you.