

Start Date
August 2026

Course Code
T10008

Duration
68 Weeks

Study Mode
Full Time

Design & Development for Engineering & Manufacturing T Level

This course is designed to provide you with the core contexts, concepts and theories required for the Engineering industry and is ideal for those interested in a career in the electrical/electronic engineering industries. This qualification requires a mandatory 315 hours (minimum) industry placement which will develop your technical skills and allow you to apply your knowledge in a workplace environment; in which you must undertake and complete in order to be successfully certified.

COURSE DESCRIPTION

T Levels are new courses which will follow GCSEs and will be equivalent to three A Levels. This two-year course has been developed in collaboration with employers and businesses so that the content meets the needs of industry and prepares learners for work. T levels are one of three post 16 options for young people which are:

- A Levels
- Apprenticeships
- T Level

UNITS/TOPICS COVERED:

Year 1:

- Working within the engineering and manufacturing sectors
- Engineering and manufacturing past, present, and future
- Engineering representations
- Essential mathematics for engineering and manufacturing
- Essential science for engineering and manufacturing
- Materials and their properties
- Mechanical principles
- Electrical and electronic principles
- Mechatronics
- Engineering and manufacturing control systems
- Quality management
- Business, commercial and financial awareness
- Professional responsibilities, attitudes, and behaviours
- Stock and asset management

- Project and programme management

Year 2

- Analyse and interpret engineering and manufacturing requirements, systems, processes, technical drawings and specifications
- Evaluate systems, designs, components and processes, managing and integrating design information, proposals and specifications, to develop and improve electrical and electronic engineering and manufacturing proposals and solutions.
- Propose and design electrical and electronic engineering and manufacturing systems, products, components, processes and solutions, considering requirements, constraints and context
- Collaborate to help manage, develop, test and quality assure electrical and electronic engineering and manufacturing design information, systems, processes and outcomes
- Communicate proposals, design information and solutions, producing, recording and explaining engineering and manufacturing representations, systems, processes, outcomes, specifications and technical drawings

EQUIPMENT NEEDED:

All students will be required to wear College uniform. Steel toe capped boots must be worn at all time when in the workshops. Students will also need to bring in stationery equipment such as pens, pencils, calculator, lever arch folder, recommended textbooks and have access to a computer and internet at home.

ENTRY REQUIREMENTS

9 GCSEs grade 9-4 (A*-C) including English, Maths and IT/Computing; or BTEC Level 2 Diploma/Extended Certificate Merit/Distinction in ICT/Computing and GCSEs grade 9-4 (A*-C) in English and Maths.

WHERE CAN THIS TAKE ME?

This technical qualification focuses on the development of knowledge and skills needed for working in the Engineering industry, which will prepare you to enter the industry through employment or as an Apprentice. Furthermore, the completion of this qualification will give you the opportunity to progress onto higher education courses and training.

HOW WILL I BE ASSESSED?

There is a continued assessment throughout the programme, allowing students to improve and develop continually. Assessment comes in a range of forms including reports, practical assessment and observation, computer based examination, online assessments and presentations.

FEES

Students aged 16 to 18, or those aged 16 to 24 who have a valid EHCP and are studying a full-time course, do not have to pay a course fee.

Please note:

There may be additional costs for equipment and educational visits.
This information will be given at your interview and will be payable at enrolment.

HOW TO APPLY

To apply online for this course please visit www.esc.ac.uk.

If you have any outstanding queries please contact our Client Services team on 01737 788444 or at clientservices@esc.ac.uk.

Disclaimer: Every effort has been made to ensure that the details contained in this leaflet are up-to-date and accurate at the time of printing. However, the College reserves the right to alter or cancel courses, their content, entry requirements, fees or other details should circumstances dictate.

Should you require this leaflet in a different format please contact Client Services on 01737 788444.