Design & Development for Engineering & Manufacturing (Electrical & Electronic Engineering) T Level 2024/25
Course Code – T10008

VENUE AND DURATION OF COURSE:
East Surrey College, Gatton Point, Redhill, RH1 2JX, 2 years Full-time.

ENTRY REQUIREMENTS:
5 GCSEs grade 9-4 including Science, English and Maths; or Level 2 Diploma/Extended Certificate in Engineering and GCSEs grade 9-4 in English and Maths.

WHAT QUALIFICATIONS WILL I GET?
T Level Technical Qualification in Design and Development for Engineering and Manufacturing (Level 3) – Electrical and Electronic Engineering.

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

TYPE OF ASSESSMENT:
- Two externally set exams covering knowledge from the engineering common core
- One employer-set project covering knowledge and core skills from the engineering common core
- One Occupational Specialism (electrical and electronic)
- Industry placement of 315-350 hours (45-50 days)

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.

WHERE CAN IT LEAD?
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.

COURSE FEE:
If you are under 19 on 31/08/2024, tuition is free. If you are 19 or over, please consult Client Services for advice and guidance on funding and eligibility.

Please be aware that there may be additional costs for equipment and educational visits. This information will be available from the curriculum staff at interview.

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

To apply online for this course please visit **www.esc.ac.uk/full-time/tlevels**

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.

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