

Curriculum Summary T level – 1st Year CORE

Autumn	Spring	Summer
<p>Students are introduced to the expectations of the T-Level and the standards of work they will aim to complete.</p> <p>This term will introduce students to the CORE units of the qualifications in their first year. The CORE will provide a theoretical framework that will be applied in practical contexts to produce practical outcomes. Students will be exposed to a range of practical applications that will help them develop the necessary skills to apply theory in real-world situations. By the end of the term, students will have a good understanding of the theoretical concepts and their practical applications, and they will be able to apply this knowledge to solve real-world problems.</p> <p>Core Unit Assessments in this term focus on Engineering History, Engineering in Context, Essential Maths for Engineering, Materials and their properties, mechanical principles and business, commercial and financial awareness.</p> <p>Students will undertake Mock examinations on the CORE content delivered in this term as well as produce written practical reports for units covered to demonstrate knowledge and understanding of the Unit.</p> <p>CORE Units, 1,3,4,5,6,7,8,12,13,15,17</p> <p>Mock assessment of CORE Units</p>	<p>This term introduces new units to the students that build on knowledge attained from the previous term, taking Mechanical principles and applying them to Mechatronics. Developing Essential Science and developing knowledge of Electrical and Electronic principles.</p> <p>CORE business units expand and cover the topics of continuous professional development and resource control.</p> <p>Quality management and Engineering Control Systems also form part of this term's focus, applying principles to real-world simulations and scenarios using the latest equipment.</p> <p>Students will prepare for the Employer Set project and undertake a supervised scenario set by the Exam Board in which they will have the opportunity to showcase a variety of skills and procedures in the design, manufacture, and presentation of an outcome to a given design brief.</p> <p>Further CORE Knowledge testing is embedded throughout the term to reinforce prior learning and further prepare students for the CORE Exams</p> <p>CORE Units, 2,3,4,5,7,9,10,11,14,16,17</p> <p>Mock assessment of CORE Units</p> <p>ESP Preparations and Assessment</p>	<p>The focus of this term includes the preparation and undertaking of the student's first Industry placement, supported by follow-up meetings with tutors and discussion of Work placement procedures and experiences. With a write-up of the experience and a reflective log produced.</p> <p>Running with this continues the Preparation for The CORE Exams one and two. With weekly information recall and preparations in place for students to analyze exam questions and formulate well-reasoned answers to examination-style questions.</p> <p>Industry Placement Wave 1</p> <p>CORE Exam 1</p> <p>CORE Exam 2</p> <p>Preparation for Op Spec mini skills assessment</p>

Curriculum Summary T level – 2nd Year – Occupational Specialism

Autumn	Spring	Summer
<p>Learners will develop their knowledge and understanding of, and skills in:</p> <ul style="list-style-type: none"> • common materials structure, composition and properties. • special requirements for tools and fixtures for the manufacture of components. • requirements for tools and fixtures to aid the manufacture of new or changed components. • how to set up, select and safely operate, the application of a range of hand tools, • operating principles of a range of complex and often state of the art workshop machinery. <p>Students will also be working towards completion of the mandatory 45 days of Industry placement</p>	<p>Learners will develop their knowledge and understanding of, and skills in:</p> <ul style="list-style-type: none"> • analysis of data, documentation, tasks, projects and specifications. • producing products to specification using suitable methods and techniques. • undertaking preventative planned maintenance and checking for faults using fault diagnosis. • Utilising project management and process improvement. <p>Students may also be working towards completion of the mandatory 45 days of Industry placement</p>	<p>On completion of this specialism, learners will be assessed on their ability to;</p> <ul style="list-style-type: none"> • Analyse and interpret engineering and manufacturing requirements, systems, processes, technical drawings and specifications. • Plan and prepare the relevant processes, tools, equipment, and resources needed to produce relevant products and produce appropriate outcomes. • Produce relevant products and outcomes, considering the specified requirements, context and materials, using the relevant machining and toolmaking technologies, methods and processes. • Support the delivery (and management) of relevant projects and activities, helping to evaluate and review processes and outcomes, and to improve practices. • Communicate production information, proposals and solutions, producing, recording and explaining relevant technical information, representations, processes and outcomes.