

<b>Title of Course</b>	Extended Engineering Diploma		
<b>Level</b>	BTEC Level 3	<b>Examination Board</b>	Pearsons
<b>What the subject is about</b>	Engineering is a vastly changing and dynamic industry which has moved quickly towards a very technical and advanced level of operation. The practical tasks complement a wide range of written skills and drawing skills, ICT applications and machine operations.		
<b>What you will learn</b>	<p>The course covers a broad range of the field of engineering, of which the following units are mandatory:</p> <ul style="list-style-type: none"> <li>• Unit 1: Engineering Principles</li> <li>• Unit 2: Delivery of Engineering Processes Safely as a Team</li> <li>• Unit 3: Engineering Product Design and Manufacture</li> </ul> <p>The remaining unit that must be taken is optional from the following selection:</p> <ul style="list-style-type: none"> <li>• Work Experience in the Engineering Sector, Computer Aided Design in Engineering, Engineering Maintenance and Condition Monitoring Techniques, Pneumatic and Hydraulic Systems, Electronic Devices and Circuits, Mechanical Behaviour of Metallic Materials, Mechanical Measurement and Inspection Technology, Computer Programming, Manufacturing Secondary Machining Processes, Fabrication Manufacturing Processes and Additive Manufacturing Processes.</li> </ul> <p>Each unit uses real-life contexts which develop your skills in technical drawings in CAD, design and communication; this manufacturers a range of technically challenging products and projects and applying ICT, CAD and CAM to a professional level.</p>		
<b>How you will learn</b>	Students will initially complete a series of core and mandatory units of study before moving on to optional units. Each unit is individually linked to live challenges with outcomes pitched, presented and documented for sponsors to use.		
<b>Independent learning</b>	Individual project learning allows you to develop as an engineer and the course is structured around fostering these skills. Students will be expected to conduct a considered amount of personal study and practical learning. In addition, there will be an opportunity for you to complete an Extended Project Qualification (EPQ).		
<b>Coursework and Examination Information</b>	<p>There will be a written exam that can be taken midway or at the end of the year, and a set task which is completed under supervised conditions at the end of the year:</p> <ul style="list-style-type: none"> <li>• <i>Paper 1 – Engineering Principles (80 marks, 2 hours)</i>: This will assess Unit 1</li> <li>• <i>Supervised Assessment – Engineering Product Design and Manufacture (60 marks, 10 hours over a 3 week period)</i>: this task is based on a provided case study and takes the form of a written submission.</li> </ul> <p>The remaining two assessments are based on Unit 2 and the remaining optional chosen units; these will be in the form of assignment submissions specific to the units using a pass, merit and distinction grading system.</p> <p>During the first year, students will complete all mandatory units required to qualify for the subsidiary Diploma; these include electrical, mechanical, mathematic, communication and health and safety topics. During the second year, Diploma students will complete all final units of study.</p>		
<b>Your future career</b>	There are a wealth of Further Education and University courses within the design and engineering field which can lead directly from an Engineering qualification. Alternatively pathways into apprenticeships or directly into the world of work are actively encouraged. Specialist interest in specific engineering fields can be catered for e.g. marine, manufacturing, automotive, system, electrical and civil.		
<b>Staff Contact</b>	Mr Wajid Riaz Leader of Design & Engineering Wajid.Riaz@uaesouthbank.org.uk 020 7277 3000	<b>Entry requirements</b>	5A* - C grades including Grade 5 in Maths