

# Designing, Engineering and Constructing a Sustainable Built Environment

## Subject Information Sheet

Course Title:	DEC: Design, Engineer and Construct
Subject:	Designing, Engineering and Constructing a Sustainable Built Environment
Qualification:	Level 3 Diploma (applied general)
Exam Board:	TQUK
General Course Description	<p>The course will take students through all aspects of the built environment and the processes to Design, Engineer and Construct a building. Site identification, stakeholder needs, Architecture, planning, structural engineering, landscape architecture, quantity surveying and project management.</p> <p>They will develop a building using professional software (Autodesk REVIT) that will meet the needs of the people of Sheffield.</p>
Course Content and Teaching Units	<p><b>Unit 1: Defining a Sustainable Construction Project</b> 12 credits (60 GLH)</p> <p><b>Unit 2: Developing a Sustainable Construction Project</b> 10 credits (60 GLH)</p> <p><b>Unit 3: Support Design, Structural and Services aspects of a Sustainable Construction Project</b> 8 credits (60 GLH)</p> <p><b>Unit 4: Deliver Design, Structural and Services Aspects of a Sustainable Construction Project.</b> 10 credits (60 GLH)</p> <p><b>Unit 5: Lifecycle and Financial Planning for a Sustainable Construction Project</b> 10 credits (60 GLH)</p> <p><b>Unit 6: Evaluating and Documenting a Sustainable Construction Project</b> 10 credits (60 GLH)</p> <p><a href="http://teachers.designengineerconstruct.com/curriculum/criteria-outcomes/level-3/">http://teachers.designengineerconstruct.com/curriculum/criteria-outcomes/level-3/</a></p>

Entry Requirements	5 in Maths and 5 in Product Design, Art or Geography Level 2 DEC (ideal)
Assessment	<p>Designing and modelling a sustainable building in Sheffield. Producing a design portfolio that explains all your decisions along the way. 50% of the course</p> <p>A written exam of all the key terms and knowledge. 50% of the course</p> <p><a href="https://teachers.designengineerconstruct.com/curriculum/criteria-outcomes/level-3/">https://teachers.designengineerconstruct.com/curriculum/criteria-outcomes/level-3/</a></p>
Financial Information	Free copy of Autodesk REVIT to use at home.
Progression Opportunities	<p>University to study: Architecture, Architecture technology, Building Services Engineering, Built Environment, Civil Engineering Construction project management, Land Surveying, Quantity Surveying, Structural engineering, Town Planning,</p> <p>High Level Apprenticeship within the Built Environment and construction</p>
Further Information about our courses including results	<p>A number of the students have taken part in work experience with local Architects, project managers, quantity surveyors, structural and civil engineers. One of our Y12 students secured a High level apprenticeship with Arup following a work placement.</p> <p><b>2017-2018</b> A*-B = 100%</p> <p><b>2018 -2019</b> A*-C = 100%</p>
Trips, visits and extra-curricular	<p>Site visits to Kelham Island, ARUP &amp; BDP companies. Working with Engineers from our partners ARUP, lecturers and students from Sheffield University and Sheffield Hallam University. Work experience can be arranged with multinational firms within different disciplines.</p>