Bishop Heber High School

Subject	Year	Term
Engineering	11	1

Topic

Investigating an Engineering Project; Responding to an Engineering Brief

Content (Intent)

Prior Learning (Topic) Component 2 & 3

Component 2 focuses on the reproduction of an engineered component following an engineering drawing. Component 3 is a response to an engineering brief and will take place under exam conditions. The students will be given brief and have to create a solution.

Future Learning (Topic) Component 2 & 3

What Knowledge and Skills will be taught (Implementation)	How will your understanding be assessed & recorded (Impact)
Component 2: Learning Aim C: Learning aim C: Plan the manufacture of and safely reproduce/inspect/test a given engineered component. All students will produce solutions to problems using different combinations of practical engineering skills, including making as part of the engineering design and make process. **Component 3: Responding to an Engineering Brief.** All students will investigate and create solutions to problems in response to specific given engineering brief.	Component 2 Learning Aim C will also be internally assessed with photographic evidence, teacher witness statements and student evaluations as the focused tasks develop. Component 3 will be formally assessed in February of Year 11 with an opportunity to re-sit the exam in the summer. Component 3 will also be included on the November Mock exams.

How can parents help at home?

You can support your child by discussing the coursework with them, allowing them to develop their portfolios at home and encouraging the students to have an aspirational attitude to their work.

Helpful further reading/discussion (including Reading and Vocabulary Lists)

Reading

BTEC Tech Award Engineering Student Guide
Financial Times
Creativity Inc. — Ed Catmull
Technologystudent.com materials and processes
Wikipedia – Engineering Components

Vocabulary Lists

Design Brief
Components
Standard Components
Specifications
Task Analysis
Iterative
Intuitive Design
Systematic Design
Inspections
Job Sheets
Log Books
Templates
Blue Prints
Technical Drawing
Risk Assessments
Developmental Design
Inspections
Quality Control
Quality Assurance
Observation Records
Witness Statements
Prototype
Modelling
Scaling
Interpreting Data
Analysis
Synthesis
Evaluation