## **Engineering Curriculum Map (Year 10)**

OCR [2022 - 2023]



End of Unit Assessment R039: NEA

Communicating designs.

Working on assessment brief

R038: User testing

To able to explain quantitative testing and user testing

R038: Modelling, and measuring

Modelling methods to be evaluated. Explain measuring devices when completing product evaluation R038: QFD

Explain ranking matrix, evaluate using the QFD method R038: Engineering product design

Evaluate designs; Compare the design brief, produce a simple model

Year 10-Term 3

R038: Sketching and drawing CAD

Compare hand sketches to CAD drawings

R038: Drawing abbreviations

Identify drawing abbreviations, and explain mechanical features R039: Drawing activities

To successfully complete assembly drawings, sectional drawings, and layout drawings by hand and CAD R039: CAD drawing

Use more detailed CAD commands

**R039: NEA** 

Communicating designs. Working on assessment brief End of Unit Assessment

End of Unit Assessment

Year 10 – Term 2

R039: Sketching designs

R039: Types of drawing

Develop skills and understanding in freehand, orthographic, oblique, and isometric drawings with understanding of symbols R038: Production methods and standards

Explore manufacturing process and costs.
Understand
British/international standards

R038: Modelling

Develop skills in modelling using card and paper. Explore the role of virtual modelling R038: Production and specification

To use ACCESSFM, identify the roles of the designer and client – Produce a design specification R038: Design strategies

To understand sustainable design, ergonomics and anthropometrics and data collection R038: Designing processes

Students will identify linear, iterative, user centred, and inclusive design

Year 10 - Term 1