

KS5 *Engineering*

AT WOOTTON ACADEMY TRUST

- Algebraic Methods
- Trigonometric Methods
- Static Engineering Systems
- Loaded Components

- Common Engineering Processes
- Health and Safety Requirements
- Human Factors



- Dynamic Systems
- Fluid Systems
- Thermodynamic Systems

- Principles of Engineering Drawing
- 2D Computer Aided Drawing

Year
12

- Design Triggers, Challenges, Constraints and Opportunities, and Materials and Processes
- Interpreting a Brief into Operational Requirements and Analysing Existing Products
- Using an Iterative Process to Design Ideas and Develop a Modified Product Proposal



The Large
Data Set

- Static Electricity
- Direct Current Electricity
- DC Circuit Theory
- Magnetism
- Single Phase AC Theory

- Principles of Effective Teams
- Team Set-Up and Organisation
- Health and Safety Risk Assessment
- Preparation Activities for Manufacture
- Delivery of Manufacturing Processes

Year
13

- Technical Justification and Validation of the Design Solution
- Explore the Safe Operation and Applications of Analogue Devices
- Explore the Safe Operation and Applications of Digital Logic Devices
- Review the Development of Analogue and Digital Electronic Circuits



Y12 Content Key:

- Engineering Principles
- Delivery of Engineering Processes Safely as a Team

Y13 Content Key:

- Engineering Product Design and Manufacture
- Electronic Devices and Circuits