

Blessed Robert Sutton

Design and Technology

Topics taught in Year 7

- Introduction to Design & Technology.
- Focus on designers and put into groups of four
- Research and presentation of Designer onto jigsaw piece.
- Typography, Isometric, One point perspective, Rendering and presentation, Speed design.
- Final Design
- Introduction to new project.
- Task analysis, Initial and developed design
- Natural Woods
- Final Design (Enlarged and Traced)
- Evaluation
- Introduction to New project. Product analysis keyring. Scribble Patten
- Recapping of 3D drawing skills.
- Thermo & Thermosetting plastics theory
- Manufacture keyring-Cutting, filing & finishing techniques
- Introduction to Jewellery project- Product Analysis
- Initial and developed design through iterative modelling
- Ferrous and Non-ferrous metals
- Manufacture- Soft soldering
- Evaluation

Topics taught in Year 8

- Introduction to project- Write a brief and Task analysis
- Product Analysis
- Write a Specification, Initial Ideas, Development of design
- Planning – Flow chart
- Manufacturing – Hole saw top & File actuator
- Manufacturing – Part B using coping saw & file actuator
- Manufacturing – Drill base, apply dowel and glue together
- Manufacturing – Drill lid and decorate jar
- Evaluate
- Game on
- Introduction and analysis, User needs and specification
- Design of game, Development of game.
- Manufacturing of board
- Development of box
- Manufacturing – Box lid
- Manufacturing – Box base, Iterative design of box interior
- Introduction to 2D Design software
- Development of counters and laser cutter
- Design/development & laser cutting of die cast mold
- Pewter casting
- Project evaluation

Topics taught in Year 9

Introduction to project – Robert Sabuda Designer Profile

- Mechanisms – levers and linkages
- Product Analysis, Mind Map –Themes
- User Profile – Research into Early Years Learners

- Specification, Design Ideas, Development
- Manufacture
- Evaluation – Testing
- Introduction to the project. Task analysis.
- Research plan and research, sketching and evaluation.
- CAD modelling, Test manufacturing and evaluation.

AQA GCSE Design and Technology 8552

Year 10

- The work of other
- Design strategies
- Polymers
- CAD/CAM
- Rapid prototyping
- Smart materials
- Modern and composites
- Natural and manufactured timbers
- Scales of production
- Paper and board
- Sustainability
- Textiles

Year 11

- NEA 50%
- Written Exam 50%
- Coursework and revision

**KS4 Specification/s
and topics taught**

AQA A level Design and Technology - Product Design 7552

Year 12

- Inclusive design
- Ergonomics and anthropometric data
- Environmental issues and sustainability
- Wood, finger joints, manmade boards and finishes to wood.
- Metals and alloys
- Joining methods
- Plastics and metals
- Composites
- Health and Safety in practice
- Role of the designer
- Design trends/periods
- Technology push/Market pull
- Product lifecycle
- Planned Obsolescence
- Communication methods
- Branding
- Sustainability
- Modern/Smart Materials
- Legislation

**KS5 Specification/s
and topics taught**

- Designers (Specific)

Year 13

- NEA
- Revision

