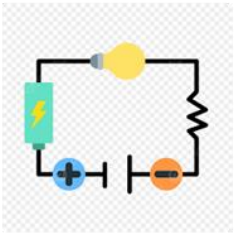
Design and Technology at Key Stage 3
DT Rotation Learning Journey

Leads into **DT Product Design** at GCSE

Planning

Skills
Shaping and joining wood

Skills
Soldering an electronic circuit

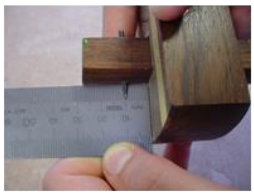


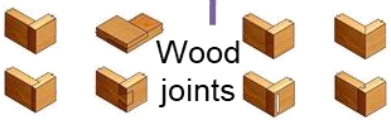
Resistors

Types of wood

YEAR 9

Skills
Marking out and cutting wood





Wood joints

Sustainability

Design and Make Clocks

Research
Design briefs
Specification

Material Properties Plastic

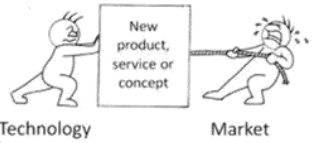
Skills
Shaping wood/plastic and vinyl

YEAR 8

Evaluation

Health and safety in the workshop

Market pull / Technology push



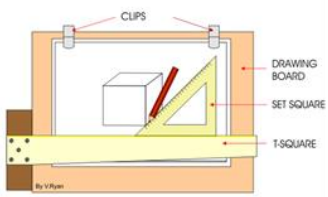
Skills
Vacuum Forming
Using hand tools
Basic templates

Skills
Shaping and Finishing

Health and safety in the workshop

Computer Aided Design

Drawing in perspective



Hand Tools and Equipment

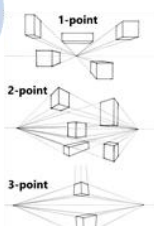
YEAR 7

Material properties Metals

SolidWorks CAD drawing

Orthographic drawing

Skills
Basic drawing skills



We will support students to develop their technical knowledge and practical skills which will enable them to solve real world problems.

Design and Technology at Key Stage 3
Food Rotation Learning Journey

Leads into Food Preparation and Nutrition or Hospitality and Catering at GCSE

YEAR 9

- **Sensory analysis**
- Using spices, herbs and seasonings.
- 
- **Culture** Britain, France, Thailand, China
- **Hob skills** Food processing, Piping, Tenderising, Stuffing, Frying
- Hazards, Risks, Control Measures
- **Hob skills**
- Knife skills – **Bridge & Claw**
- **Meat safety**
- **Healthy eating** Nutrients, Eatwell guide
- 4 C's, **food hygiene and safety**
- Skills: Rubbing in, Baking, Mixing, Shaping, Dicing

YEAR 8

- **Culture** Italy, Britain
- Special dietary needs
- Knife skills – **Bridge & Claw**
- **Hob Skills** Frying, Melting, Boiling, Simmering
- **Sensory analysis**
- 

- Hazards, Risks, Control Measures
- **Healthy eating** Nutrients, Eatwell guide
- Functions of ingredients
- **Meat safety** and cooking temperatures

YEAR 7

- Commodities: where does our food come from?
- **Healthy eating**
- Introduction to nutrients: -Carbohydrates, -Protein, -Fat, -Calcium, -Vitamins, minerals
- 
- **Sensory analysis**
- Diets
- Personal hygiene
- 

- Skills: Chopping, Dicing, Slicing, Mixing, Rubbing in
- Culture: Italy, Britain, Morocco
-
- Knife skills – **Bridge & Claw**
- Skills: Measuring, weighing, **Baking**
- **Food hygiene and safety**
- 

We will support students to develop their technical knowledge and practical skills which will enable them to solve real world problems.

Design and Technology at Key Stage 3
Textiles Rotation Learning Journey

Leads into **DT Product Design** at GCSE

YEAR 8

- Properties of fibres
- Fabric construction
- 6 R's
- Design and Make Felt food
- Health and Safety
- Environmental issues
- Smart and Modern materials
- Evaluation

- Evaluation
- Design and Making Wall Hanging
- Decorative techniques
- Properties /Testing
- Sources of fibres
- Tools and equipment
- Product analysis
- Marking out
- Basic embroidery stitches
- Skills Threading a needle
- Health and Safety

YEAR 7

We will support students to develop their technical knowledge and practical skills which will enable them to solve real world problems.

Design and technology key stage 3 curriculum intent

We will support students to develop their technical knowledge and practical skills which will enable them to solve real world problems.

At Hall Park Academy, our Key Stage 3 Design and Technology curriculum is designed to inspire, engage, and equip our students with the essential knowledge, skills, and creativity required to become innovative problem solvers and responsible global citizens. We believe that Design and Technology (D&T) plays a pivotal role in nurturing the next generation of designers, engineers, nutritionists, fashion designers, chefs and critical thinkers.

Our curriculum intent for Key Stage 3 D&T can be summarised in the following key principles:

1. **Inspiration and Creativity:** We aim to foster a deep sense of curiosity and creativity among our students. By exploring real-world design challenges and encouraging out-of-the-box thinking, we empower them to generate innovative solutions that address current and future needs.

2. **Practical Skills and Technical Proficiency:** Our curriculum equips students with a wide range of practical skills in the workshop and the skills to cook a repertoire of dishes. They will learn to use tools and technologies safely and proficiently, promoting hands-on learning experiences in DT, Food and Textiles.

3. **Design Thinking and Problem Solving:** We teach students the principles of design thinking, emphasizing the importance of empathy, ideation, prototyping, and testing. These problem-solving skills are transferable and essential for tackling complex challenges in various fields.

4. **Sustainability and Ethical Considerations:** We instil an awareness of environmental and ethical responsibilities in design and cooking. Students will explore the concepts of sustainability, seasonality and food miles.

5. **Interdisciplinary Learning:** D&T is integrated with other subjects, fostering cross-curricular connections. Students apply mathematical and scientific principles to their design projects, enhancing their understanding of the interconnectedness of knowledge.

6. **Digital Competence:** In a digital age, we emphasise the importance of digital literacy. Our students are introduced to computer-aided design (CAD).

7. **Safety and Responsibility:** We prioritise the safety of our students in practical activities. They are taught not only how to use tools and equipment safely but also to take personal responsibility for their actions in a workshop or kitchen setting.

8. **Assessment for Learning:** Continuous assessment and feedback help students track their progress and improve their skills. We celebrate their achievements and support them in areas where they may need additional guidance.

9. **Real-World Applications:** We connect classroom learning to real-world contexts by inviting guest speakers, visiting industry sites, and engaging in collaborative projects with local businesses and organizations.

10. **Preparation for Key Stage 4 and Beyond:** Our KS3 D&T curriculum serves as a foundation for further study and career choices. Students have the opportunity to pick Food Preparation and Nutrition, Engineering or DT at KS4.

GCSE AQA Design and Technology Curriculum at Hall Park Academy

We will support students to develop their technical knowledge and practical skills which will enable them to solve real world problems.

Term	Half term 1	Half term 2	Half term 3	Half term 4	Half term 5	Half term 6
Year 10	**Basic wood joints**	**Materials jointing**	**Drawing skills**	**CAD skills**	**Mock NEA**	**NEA 1 introduction**
Content	**Unit 3 - Materials:** - Papers and boards - Timbers - Metals and alloys - Polymers - Textiles	**Unit 4 - Common specialist technical principles:** - Forces and stresses - Improving functionality - Ecological and social footprint - The 6 R's - Scales of production	**Unit 5 - Timber based materials:** - Sources and origins - Working with Timbers - Commercial manufacturing **Unit 6 - Designing principles:** - Investigating primary and secondary data - The work of other designers and companies *Work experience is during half term 3.	**Unit 6 - Designing principles:** - Design strategies - Communication of design ideas **Unit1 – New and emerging technologies** - Industry and enterprise - Sustainability and the environment - People, culture and society	**Unit1 – New and emerging technologies** - Production techniques and systems - Informing design decisions **Unit 2 – Energy, materials, systems and devices** - Energy generation - Energy storage - Modern materials	**Re-cap on skills and how they will be used for the NEA.** **Students will focus on research for the NEA.** **Unit 2 – Energy, materials, systems and devices** - Smart materials - Composite materials - Systems approach to designing - Electronic systems processing - Mechanical devices
Year 11	**NEA 1 50% of the course: 100 marks**				**GCSE exams**	
Content	**Unit 7 – Making principles** - Selection of materials and components - Tolerances - Material management - Tools, equipment, techniques and finishes - Surface treatments and finishes	Substantial design and make task Assessment criteria:- -Identifying and investigating design possibilities -Producing a design brief and specification -Generating design ideas -Developing design ideas -Realising design ideas -Analysing & evaluating In the spirit of the iterative design process, the above should be awarded holistically where they take place and not in a linear manner Contextual challenges to be released annually by AQA on 1 June in the year prior to the submission of the NEA Students will produce a prototype and a portfolio of evidence Work will be marked by teachers and moderated by AQA			**Section A – Core technical principles (20 marks)** A mixture of multiple choice and short answer questions assessing a breadth of technical knowledge and understanding. **Section B – Specialist technical principles (30 marks)** Several short answer questions (2–5 marks) and one extended response to assess a more in depth knowledge of technical principles. **Section C – Designing and making principles (50 marks)** A mixture of short answer and extended response questions. Written exam: 2 hours Marks: 100 50% of the course	

GCSE AQA Design and Technology Curriculum Intent at Hall Park Academy

We will support students to develop their technical knowledge and practical skills which will enable them to solve real world problems.

At Hall Park Academy, our GCSE AQA Design and Technology curriculum is designed to inspire, challenge, and equip our students with the knowledge and skills needed to become innovative designers, critical thinkers, and responsible contributors to the ever-evolving world of design and technology.
Our curriculum intent for GCSE AQA Design and Technology can be summarised in the following key principles:

- **Creative and Innovative Design:** We aim to nurture creativity and innovation in our students. Through hands-on design projects, they will learn to conceptualize, plan, and create products that meet real-world needs and demonstrate unique design thinking.

- **Practical Skills Proficiency:** Our curriculum places a strong emphasis on developing practical skills. Students will master a wide range of techniques, including CAD (Computer-Aided Design), prototyping, manufacturing, and problem-solving in a workshop setting.

- **Design Thinking and Problem Solving:** We teach students the principles of design thinking, emphasising empathy, ideation, prototyping, and testing. These problem-solving skills are essential for addressing complex challenges in various design fields.

- **Materials and Manufacturing Processes:** Students will gain an in-depth understanding of materials, their properties, and how they can be manipulated in the design and manufacturing process. This knowledge includes sustainable and ethical considerations in materials selection.

- **Interdisciplinary Learning:** Design and Technology is integrated with other subjects, promoting cross-curricular connections. Students will apply mathematical, scientific, and artistic principles to their design projects, fostering a holistic understanding of the subject.

- **Digital Competence:** In an increasingly digital world, we emphasize digital literacy. Students will learn to use CAD software, 3D printing, and other digital tools, preparing them for careers in design and technology.

- **Sustainability and Ethical Considerations:** We instil an awareness of environmental and ethical responsibilities in design and production processes. Students will explore sustainable design practices and the ethical implications of their design choices.

- **Safety and Responsibility:** We prioritise safety in practical activities. Students are taught not only how to use tools and equipment safely but also to take personal responsibility for their actions in a workshop environment.

- **Real-World Applications:** We connect classroom learning to real-world contexts by inviting guest speakers, visiting industry sites, and engaging in collaborative projects with local businesses and organisations.

- **Preparation for Future Study and Careers:** Our GCSE AQA Design and Technology curriculum serves as a solid foundation for further study in design-related disciplines and future careers in design, engineering, architecture, or related fields.

GCSE AQA Food Preparation and Nutrition Curriculum at Hall Park Academy

We will support students to develop their technical knowledge and practical skills which will enable them to solve real world problems.

Term	Half term 1	Half term 2	Half term 3	Half term 4	Half term 5	Half term 6
Year 10	**Food nutrition and health and Food choice**	**Food science and Food provenance**	**Food science**		**Food science**	**NEA mock**
Content	-Primary and secondary processing. -Function and chemical properties of bread ingredients. -Food miles. -Sensory testing. -Seasonal produce. -Nutrients. -Functions of water. -Environmental factors. Theme: Soup and bread. *Cooking skills and food safety will be developed and interleaved throughout the year.	-Sensory testing. -Function and chemical. properties of cake ingredients. -Additives -Proteins and foams. -Dextrinisation, -Caramelisation. -coagulation. -Nutrients. Theme: Cake.	-Pastry types. -Shortening. -Laminating. -Nutrients. -Finishing techniques. -Cooking methods: -boiling -steaming -frying -roasting -baking. Theme: Pastry *Work experience is during half term 3		-Emulsification. -Enzymic browning. -Cooking methods. -Nutrients. -Methods of heat transfer: -radiation -convection -conduction. Theme: Colloidal structures	This will give students the opportunity to put all their previous knowledge into practice in the form of a mock NEA. 3.2 Food, Nutrition and health: Macronutrients, Micronutrients, nutritional needs and health 3.3 Food Science: cooking of food and heat transfer, Functional and chemical properties of food 3.4 Food Safety: Food spoilage and contamination, Principles of Food Safety 3.5 Food Choice: Factors affecting food choice, British and International cuisines, Sensory evaluation 3.6 Food Provenance: Environmental impact and sustainability of food, Food processing and production
Year 11	**NEA 1 15% of the course**	**NEA 2 35% of the course**			**GCSE exams**	
Content	Task 1: Food investigation (30 marks) Students' understanding of the working characteristics, functional and chemical properties of ingredients.	Task 2: Food preparation assessment (70 marks) Students' knowledge, skills and understanding in relation to the planning, preparation, cooking, presentation of food and application of nutrition related to the chosen task. Students will prepare, cook and present a final menu of three dishes within a single period of no more than three hours, planning in advance how this will be achieved.			Paper 1: Food preparation and nutrition What is assessed? Food, nutrition and health Food science Food safety Food choice Food provenance Written exam: 1 hour 45 minutes 100 marks 50% of GCSE	

GCSE AQA Food Preparation and Nutrition Curriculum Intent at Hall Park Academy

We will support students to develop their technical knowledge and practical skills which will enable them to solve real world problems.

At Hall Park Academy, our GCSE AQA Food Preparation and Nutrition curriculum is designed to provide students with a comprehensive understanding of the principles of nutrition, food preparation, and culinary science. We aim to inspire a lifelong appreciation for food, nutrition, and healthy eating habits while equipping students with the skills and knowledge needed for success in this field and beyond. Our curriculum intent for GCSE AQA Food Preparation and Nutrition can be summarised in the following key principles:

- **Nutritional Literacy:** Our curriculum focuses on developing a deep understanding of nutrition. Students will learn about the essential nutrients, dietary requirements, and the impact of food choices on health and well-being. They will be able to critically analyse food labels and make informed dietary decisions.

- **Creative Culinary Exploration:** We encourage students to explore their creativity in the kitchen. They will have the opportunity to develop their own recipes, experiment with flavours, and create visually appealing dishes.

- **Understanding Food Science:** Our curriculum delves into the science behind cooking and food preservation. Students will learn about the chemical and physical transformations that occur during cooking and gain insight into food preservation methods.

- **Sustainability and Ethical Considerations:** We emphasise the importance of sustainable food choices and ethical considerations in food production and consumption. Students will explore topics such as food waste reduction, sustainable sourcing, and ethical food practices.

- **Health and Well-being:** Our curriculum promotes a holistic approach to health and well-being. Students will understand the relationship between diet and health, including the prevention of diet-related diseases.

- **Independent Learning and Research:** We encourage independent research and investigation. Students will have the opportunity to explore food-related topics of interest, conduct experiments, and present their findings.

- **Real-World Application:** We connect classroom learning to real-world contexts by inviting guest speakers from the food industry, visiting food production facilities, and participating in culinary competitions or work placements.

- **Inclusivity and Diversity:** Our curriculum celebrates the diversity of culinary traditions from around the world and promotes inclusivity in food choices. We ensure that all students feel welcome and valued, regardless of their background or dietary preferences.

- **Preparation for Further Study and Careers:** Our GCSE AQA Food Preparation and Nutrition curriculum serves as a foundation for further study in food science, nutrition, or culinary arts. It also prepares students for potential careers in the food industry, dietetics, or related fields.

EDUQAS Engineering Curriculum at Hall Park Academy

We will support students to develop their technical knowledge and practical skills which will enable them to solve real world problems.

Term	Half term 1	Half term 2	Half term 3	Half term 4	Half term 5	Half term 6
Year 10	**Drawing skills**	**Bike spanner**	**Bike spanner cont'd**	**Egg cup**	**CAD – Solidworks and 2D design**	**Planning NEA folder**
Content	**Unit 1 preparation – Understanding engineering drawings** - Interpreting information from drawings for manufacture - Handtools - Isometric drawings - Orthographic drawings - One and two point perspective	**Workshop health and safety** - Selecting and working safely with the appropriate tools - Working safely with machines - Risk assessments Materials: - Metals and alloys - Timbers - Polymers and plastics	**Continue practical skills of making bike spanner** - Use of pillar drill - Buffing and polishing machine - Mock folder work: creating a given engineered item - Planning and contingencies *Work experience is during half term 3.	**Revisit drawing skills and marking out acrylic** - Use of lathe and milling machine - Use of other hand tools and marking out equipment - Permanent and temporary fixings - Line bending acrylic	**Unit 2 preparation - Understanding products and needs** - Features / requirements - Target markets - Design strategies - Communicating design ideas to solve problems	**Unit 3 preparation** - Structural design bicycles - Mechanical design theme parks - Electronic design mobile phones and smart technology - Applying Ohm's law - Calculating areas and volumes
Year 11	**Unit 1 40% of the course**		**Unit 2 20% of the qualification**		**Exams**	
Content	**Manufacturing Engineering Products** This unit introduces learners to interpreting different types of engineering information in order to plan how to produce engineered products. Learners will develop the skills needed to work safely with a range of engineering processes, equipment and tools. With these skills, learners will acquire knowledge of a range of engineered processes that are fit for purpose for producing an end product. Finally, learners will learn how to test the final product against the information given in the technical information to ensure that they have met the given standards of the assigned brief. Topics: 1.1 Understanding engineering drawings 1.2 Planning operations 1.3 Using engineering tools and equipment 1.4 Implementing engineering processes		**Designing Engineering Products** The unit is linked to the engineering product produced in Unit 1 of the qualification. It will require the learner to work to a given brief to adapt an existing component, element or part of the engineering outcome that they produced for Unit 1. Topics: 2.1 Understanding function and meeting requirements 2.2 Proposing design solutions 2.3 Communicating an engineered design solution 2.4 Solving applied engineering problems		**Solving Engineering Problems** Written examination: 1 hour 30 minutes 40% of qualification What is assessed? 3.1 Understanding the effects of engineering achievements 3.2 Understanding properties of engineering materials 3.3 Understanding methods of preparation, forming, joining and finishing of engineering materials 3.4 Solving engineering problems	

EDUQAS Engineering Curriculum Intent at Hall Park Academy

We will support students to develop their technical knowledge and practical skills which will enable them to solve real world problems.

At Hall Park Academy, our WJEC Level 1/2 Engineering curriculum is designed to inspire, educate, and empower our students with the knowledge and skills needed to embark on successful careers in engineering and related fields. We strive to instil a passion for innovation, problem-solving, and technological advancement while preparing students for the dynamic and ever-evolving world of engineering.
Our curriculum intent for WJEC Level 1/2 Engineering can be summarized in the following key principles:

- **Foundations of Engineering:** We provide a comprehensive understanding of engineering principles, including mechanical, electrical, electronic, and structural concepts. Students will develop a solid foundation upon which to build specialised engineering knowledge.

- **Practical Skills Mastery:** Our curriculum emphasizes hands-on learning. Students will acquire practical skills in engineering, including design, fabrication, assembly, and testing of components and systems.

- **Problem-Solving and Design Thinking:** We foster problem-solving skills and design thinking in our students. They will learn to analyse complex engineering challenges, generate creative solutions, and apply the engineering design process effectively.

- **Materials and Manufacturing Processes:** Students will gain insights into materials science, manufacturing techniques, and sustainable production practices. This knowledge extends to the ethical and environmental aspects of engineering materials and processes.

- **Interdisciplinary Learning:** Engineering is inherently interdisciplinary. Our curriculum integrates mathematics, physics, and design principles, enhancing students' ability to apply scientific concepts to engineering projects.

- **Digital Competence:** We equip students with digital literacy and skills in computer-aided design (CAD) and simulation software. This prepares them for the digital transformation of engineering practices.

- **Sustainability and Ethical Engineering:** We emphasize the importance of sustainable engineering practices and ethical considerations. Students will explore the impact of engineering decisions on the environment, society, and ethical issues that may arise in engineering projects.

- **Safety and Responsibility:** Safety is paramount in engineering. We teach students to identify and manage risks in engineering activities, instilling a strong sense of responsibility for their safety and that of others.

- **Real-World Applications:** We connect classroom learning to real-world engineering contexts through industry visits, guest speakers, and hands-on projects in collaboration with local engineering firms and organizations.

- **Preparation for Further Study and Careers:** Our WJEC Level 1/2 Engineering curriculum serves as a strong foundation for further study in engineering or related disciplines and prepares students for potential careers in mechanical engineering, electrical engineering, civil engineering, and beyond.

A-Level Design and Technology at Hall Park Academy

We will support students to develop their technical knowledge and practical skills which will enable them to solve real world problems.

Term	Half term 1	Half term 2	Half term 3	Half term 4	Half term 5	Half term 6
Year 12						
Content	Preparation for the NEA. A series of small, skills based projects that take place over terms one and two to provide students with the skills needed to complete the individual NEA. These projects should cover a range of materials and processes outlined in the specification along with elements of CAD and sketching. They could also be used to deliver or reinforce elements of the theoretical knowledge that may be examined in Paper 1 and Paper 2. **Common Deadline - Skateboard Project: Crossover:-** Lamination, Woods, Testing, Finishing, Jigs/Templates, Tolerance. Presentation techniques and drawing techniques, rendering skills, use of fine liners. **Inclusivity project (Toothbrush)** **Arthritis Toothbrush Project:-** Anthropometrics/Ergonomics, User centered Design, Data collection, Inclusive design, CAD modelling (fusion) and 3D printing, modelling, Styrofoam modelling, sealing, finishing, Prototype development, Presentation of design and modelled iterations.		**Turning jewelry-** Anthropometrics/Ergonomics, Centre lathe, turning. Jewelry **Etsy Project (Flat Pack): Crossover:-** UCD, Context investigation, 2D design skills, Tessellation, Writing specifications, Product Analysis, Use of laser (student independence), Laser set up and file checking.	**Timbers/lamp:** Designing and making task looking at the use and style of a lamp embedding an electrical standard component. Design movements and design history including: • arts and craft movement • Art Deco • Modernism, eg Bauhaus • Post modernism, eg Memphis. • Phillipe Starck • James Dyson • Margaret Calvert • Dieter Rams • Charles and Ray Eames • Marianne Brandt.	Start of NEA portfolio AO1 Section A – Identifying and investigating design possibilities (20 marks) Rationale for chosen context clearly identified. Investigation including: disassembly, practical experimentation, visits, surveys and interviews, focus groups, primary and secondary research. Investigation material thoroughly analysed and initial concepts generated.	AO1 Section B – Producing a design brief and specification (10 marks) Produce a clear and challenging design brief and fully detailed design specification reflecting thorough consideration of investigations undertaken. **Designer case studies uploaded to Teams.**
Year 13	**NEA 50% of the course** Practical application of technical principles, designing and making principles.				**Exams**	
Content	AO1: Identify, investigate and outline design possibilities to address needs and wants. AO2: Design and make prototypes that are fit for purpose. AO3: Analyse and evaluate: • design decisions and outcomes, including for prototypes made by themselves and others • wider issues in design and technology. AO4: Demonstrate and apply knowledge and understanding of: • technical principles • designing and making principles.				Paper 1 - Technical principles How it's assessed: • Written exam: 2 hours and 30 minutes • 120 marks • 30% of A-level Paper 2 - Designing and making pr How it's assessed: • Written exam: 1 hour and 30 minute • 80 marks • 20% of A-level	

EDUQAS Engineering Curriculum Intent at Hall Park Academy

We will support students to develop their technical knowledge and practical skills which will enable them to solve real world problems.

A-level DT curriculum intent

At Hall Park Academy, our A-Level Design and Technology curriculum is designed to provide students with an advanced and in-depth understanding of design, innovation, and technological solutions. This program aims to inspire, challenge, and prepare our students for careers in design, engineering, architecture, and related fields while fostering a lifelong love for creative problem-solving and innovation.

Our curriculum intent for A-Level Design and Technology can be summarized in the following key principles:

- **Advanced Design and Innovation:** We encourage students to explore design concepts at an advanced level. They will engage in complex design challenges, develop innovative solutions, and push the boundaries of creative thinking.

- **Mastery of Technical Skills:** Our curriculum focuses on honing technical skills to a high level of proficiency. Students will gain expertise in CAD (Computer-Aided Design), manufacturing techniques, materials science, and advanced prototyping.

- **Design Thinking and Problem Solving:** We foster advanced problem-solving skills and design thinking. Students will learn to approach complex challenges methodically, conduct thorough research, and develop innovative solutions through iterative design processes.

- **Materials and Manufacturing Technologies:** Students will delve deep into materials science and advanced manufacturing technologies, including additive manufacturing (3D printing), CNC machining, and sustainable production methods.

- **Digital Competence:** In an increasingly digital world, we equip students with advanced digital skills, including the use of sophisticated CAD, simulation, and prototyping software. These skills prepare them for the evolving landscape of technology-driven design.

- **Sustainability and Ethical Design:** We emphasize sustainable design practices and ethical considerations in engineering and technology. Students will explore advanced topics such as sustainable materials, energy-efficient design, and the social and environmental impacts of technology.

- **Safety and Responsibility:** Advanced engineering projects demand a heightened sense of safety and responsibility. We instill a strong commitment to safety protocols and ethical decision-making in engineering activities.

- **Real-World Applications:** We facilitate real-world connections through industry partnerships, internships, and advanced projects that address contemporary challenges in design and technology.

- **Inclusivity and Diversity:** Our curriculum celebrates diversity and promotes inclusivity in design and technology. We strive to create an environment where all students feel valued and empowered to contribute their unique perspectives to the field.

- **Preparation for Higher Education and Careers:** A-Level Design and Technology serve as a strong foundation for further study in design-related disciplines at university level and prepare students for careers in engineering, architecture, industrial design, and other related fields.