

## Together: we care, we challenge, we excel.

### "As designers, we have a great responsibility" Dieter Rams – Industrial Designer



#### KEY STAGE 3

The Technology faculty is made up from a range of inspiring, rigorous and practical subjects which prepare our young people to live and work in the designed and made world. We will help students develop their ability to design, plan, manufacture and evaluate a wide range of products. We aim to promote problem solving through innovative design. Students are given the opportunity to use a wide variety of equipment and software to realise their ideas. Our areas include:

COMPUTING Students are encouraged to use computational thinking methods to help them become independent and resilient problem solvers. This leads on to programming using visual, textual, event driven and flowchart based languages to control on screen scenarios, robots, micro devices and 3D printing.

**PRODUCT DESIGN** In this subject, students learn how to design and manufacture a wide variety of products while learning about design in the modern world. Our young designers get to use a wealth of equipment, ranging from traditional hand tools and machines through to state of the art laser cutting and 3D printing technology.

FOOD TECHNOLOGY: Students learn all about food, the impact it has on our health and how to prepare and skilfully cook delicious and nutritious meals for different people and situations. They will learn about the functions of ingredients, how they are produced and develop an awareness of different cultures, to become informed and thoughtful consumers of food.



# Tavistock COLLEGE

# Together: we care, we challenge, we excel.

## "Design is not just what it looks like and feels like, it's how it works"

Steve Jobs



#### KEY STAGE 4

GCSE COMPUTING A practical subject applying programming knowledge and skills to real-world problems. An intensely creative subject that involves invention and excitement. The course values computational thinking and problem solving, helping learners to develop the skills to solve problems and design systems that do so.

BTEC CONSTRUCTION Developing students into craftsmen and women of the future. Students learn a wide range of skills including brick laying, plumbing, tiling, electrical work and carpentry. Students also learn about the built environment and sustainability issues within construction.

GCSE HOSPITALITY & CATERING Learning about food in the widest sense, its composition and health affects, it's origin, production and marketing, how food choices affect the global environment and how to be informed, thoughtful consumers. Applying knowledge and understanding of food nutrition, preparation and cooking, pupils will create delicious dishes.

GCSE PRODUCT DESIGN This GCSE places greater emphasis on understanding and applying iterative design processes. Students will use their creativity and imagination to design and make prototypes and products that solve real and relevant problems, considering their own and others' needs, wants and values. The GCSE encourages students to explore design and technology across all material areas including metals, woods, plastics, composites papers, boards and fabrics. Students specialise in a particular material area as the course progresses. Students will constantly be challenged through problem solving and thought provoking design briefs. This GCSE leads perfectly to a career in product design, manufacturing, furniture design, architecture and engineering. Students are able to use traditional tools and equipment alongside new technologies and sophisticated CAD software. 50% of the course is assessed through written examination and 50% is through non exam assessment, which takes place in year 11.

# Head of Technology & Computing: Mr Michael Harris