# Design Technology and Engineering

You will investigate, design and create products that solve design problems within a variety of contexts. You will critically evaluate existing technologies apply skills, processes and techniques to develop innovative product design, digital design and/or environmental design solutions. Digital or physical solutions could involve electronics, robotics, 3D printing prototypes, laser cutting materials, 3D digital models, coding, VR and architectural design.

**Year 10 Elective**

| Engage *Skills* | Extend *Knowledge* | Enrich *Experiences* |
|---|---|---|
| • Creative thinking -develop creative ideas<br>• Critical thinking<br>• Evaluation<br>• Problem solving<br>• Communication of ideas through a variety of mediums<br>• Planning<br>• Researching<br>• Investigate existing possible solutions<br>• Produce a solution | • Design specific language<br>• Design brief constraints<br>• Mediums of communication | • Integrates other disciplines – Mathematics and Science<br>• Design products through the design cycle across personal area of interest<br>• School based exhibition<br>• Incursions – designers from various disciplines<br>• Excursions – Match Studio |

| Assessments/Outcomes | Pathways |
|---|---|
| • Investigation<br>• Planning<br>• Skill development<br>• Design product<br>• Evaluation | **Subject Pathways:** Stage 1 Design, Technology and Engineering<br>**Career Pathways:** IT Manager, Industrial Engineer, Game Developer, Computer Network Engineer, Systems Analyst, Web Designer, Mechanic, Construction, Manufacturing, Project Management, Electronics Engineer, Records Manager, Teacher, Software Engineer, ICT Technician, Policy Analyst, Statistician, Electronics Engineer, Electrician, Electrical Engineer, Audiovisual Technician, Locksmith |

**Walford**