

## Year 9/10 Design and Technology

*This subject has a levy for material costs on a per term basis (approx. \$50).*

Design and Technology is a subject that integrates design theory with practical workshop-based projects to give students an opportunity to design, manufacture and evaluate creative solutions to everyday problems. Using a scaffolded design process as a central framework, students are encouraged to create innovative design solutions within specific focus areas of study. These include product, systems and environmental design. The practical projects provide an opportunity for students to explore working with plastics, wood, metal and electronics.

Central to this course is the College's advanced workshop and manufacturing technologies. These resources allow students of all skill levels to combine Computer Aided Design (CAD) with contemporary manufacturing technology to produce high quality design solutions as practical projects.

Design and Technology incorporates a STEM-based approach to learning (Science, Technology, Engineering and Maths). Students are introduced to CAD and Computer Aided Manufacture (CAM) engineering principles, aerodynamics, solar voltaics, and advanced manufacturing techniques.

The safe use of workshop equipment is a key concept in this course and all students are taught, and required to demonstrate, a clear understanding of Workplace Health and Safety (WHS) practices.

