SUBS in Schools

Year 10 at Walford
Her Way

You will design and build a ROV (remotely operated underwater vehicle) or a 3D Virtual Reality submarine living space using CAD software, 3D printing, laser cutting and VR technology. Work in a team to project manage the product and business development along with its branding and marketing. You will obtain sponsorship to fund the project and present the product and business at a trade display, including a verbal presentation for industry professionals. Roles in the team include Team Manager, Design Engineer, Resources Manager, Manufacturing Engineer and Graphics Designer.

Semester Elective Subject

Engage
Skills

- Teamwork
- Collaboration with industry mentors
- Preparing a business plan and obtaining sponsorship
- Researching to expand knowledge
- Designing and building using computer-aided design (CAD), 3D printing and laser-cutting
- Testing and improving designs
- Presenting portfolios, engaging the public in a trade display and giving a team verbal presentation

Extend
Knowledge

- Buoyancy and propulsion
- Electric circuits
- Engineering standards and terminology
- Effective visual, written and verbal communication
- Industry opportunities

Enrich
Experiences

- Excursions to Australian Submarine Corporation, SAAB Australia and universities
- Mentoring by engineers working in the industry
- State and potentially national and international competitions
- Science and Engineering Challenge

Assessments/Outcomes

- Enterprise Portfolio – Business and marketing
- Engineering Portfolio – Designing, manufacturing and testing the product
- Trade Display
- Verbal Presentation

Pathways

Subject Pathways: Business Innovation, Design Technology & Engineering, Mathematics, Physics, Visual Arts - Design

Career Pathways: Engineer, Industrial Design, Defence Scientist, Mechanic, Interior Architect, Construction, Manufacturing, Project Management

Walford