

Advanced Manufacturing and Electronics (Elective Subject)

Subject Code: AME

Prerequisites: Nil

Additional Subject Fee: \$80 consumables cost in Year 9 and
\$50 in Semester 1 Year 10

Course Overview

The **Advanced Manufacturing and Electronics** course explores cutting-edge techniques and technologies in the design and production of manufactured products. Students will engage with Computer-Aided Design (CAD) and Computer-Aided Manufacturing (CAM) software to create real-world projects, utilising advanced manufacturing machines like laser cutters, 3D printers, and CNC routers for precise fabrication. In addition, students will learn about electronics systems and how to integrate them with mechanical components to create multi-functional systems.

Course Outline

Unit 1 Electric Cars - Design and prototyping

Unit 2 Land Yachts – Remote control

Unit 3 Bottle Rockets

Assessment

- Design folios
- Prototypes and finished products

Subject Requirements

2B pencil, eraser and laptop

BYOD program Please refer to the 'Bring Your Own Device (BYOD) booklet for the minimum specifications required before purchasing a device. Minimum of Intel 5 to handle the software.

Career Pathways

Mechatronics, Industrial Designer, Cabinet Maker, Electrician, CNC Machinist, Electronics Technician, Engineer, Manufacturing and more.