

<b>Subject name</b>	<b>Engineering, Robotics and Technologies</b>
<b>Subject code</b>	ERT
<b>Additional subject cost</b>	\$35 consumables cost in Year 9 and \$30 in Semester 1 Year 10.
<b>Prerequisites</b>	Sound achievement in Maths and Science is required.
<b>Course overview</b>	<ul style="list-style-type: none"><li>- introduce students to electrical technologies, theory of electrical design, robotics and associated technologies</li><li>- introduce students to beginner programming</li><li>- introduce students to prototype designing</li><li>- develop knowledge and skills in preparation for senior Engineering</li></ul>
<b>Course outline</b>	Accessing and constructing information; digital communication and publishing; interfacing with machines; electrical safety; project planning and design; prototype design and construction; wood and plastics construction, moulding; introductory electronics; electronics theory and design; digital electronics and circuitry construction; robotics design and construction; robotics programming; flow charts; design processes; soldering techniques; wiring techniques, basic engineering principles and design
<b>Assessment</b>	May include exams, assignments, portfolio of work, group work and class participation.
<b>Subject requirements</b>	Display folder for handout pages - this becomes the student's manual. A USB of 16 GB is required specifically for this subject. Students are expected to bring safety glasses for practical workshop sessions.
<b>BYOD program</b>	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 software.
<b>Career opportunities</b>	Automotive electrician, computer programmer, computer technician, electrical engineer, electrical fitter, electronics service person, software engineer. Leads into programming incorporated into Digital Solutions and/or Engineering in Years 11 and 12.