ISTEM
(INTEGRATED SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS)

ISTEM may be studied as a 100-hour course (Year 9 or Year 10) or as a 200hour (Years 9 and 10) course in Stage 5.

Course Description

Science, Technology, Engineering and Mathematics are fundamental to shaping the future of Australia. These subjects provide skills and knowledge that increasingly underpin many professions and trades. The ISTEM course utilises these focus areas to develop students' knowledge and skills to support the skills of a technologically based workforce.

What will students learn about?

ISTEM covers a number of modules in the fields of technology and engineering. They include; Aerodynamics, Coding, Motion, Robotics, Engineering, Unmanned Aerial Vehicles – Drones (UAV), Introductory Physics and Biological concepts as they relate to aspects of STEM.

To satisfy the requirements of the course students must undertake a range of inquiry-based learning and Problem-based learning activities which occupy the majority of course time.

All modules interconnect and integrate a number of current ISTEM intervention initiatives that the school participates in, including the Science and Engineering Challenge. This course also integrates with other initiatives that will be implemented on the commencement of this course. These include:

- Subs in Schools
- Robo Cup
- CO_2 Velocity Challenge
- Aurecon Bridge Building Competition

What will students learn to do?

Students will learn to use a range of tools, techniques and processes, including relevant technologies in order to develop solutions to a wide variety of problems. The ISTEM program utilises a practical integrated approach with engineering and technology being used to drive interest in Science and Mathematics, through the development of technical skills and mechanical engineering knowledge.

Record of School Achievement

Satisfactory completion of ISTEM course during Stage 5 will be recorded with a grade on the student's Record of School Achievement (RoSA).