

DIGITAL TECHNOLOGIES

ELECTIVE
SUBJECT

Year 10

Course Outline: Over the course of the two years, students will develop 21st century skills and complete units of work covering topics from the Australian Curriculum Digital Technologies curriculum. These topics include: management, security and privacy of network systems; compression of data; design and create user interfaces, coded solutions; evaluate and test designs and solutions.

Student will study 8 Units of work in a Year A/B sequence to enable a multi-year classroom.

Learning Experiences:

- Write and test Python code to control a robot
- Create a websites using modern frameworks and external data
- Design and create an Information system for a business
- Investigate Collaboration, Management, Encryption, Security, Privacy in networks
- Create a serious game in JavaScript for the web

Duration: 1 year

Assessment:

- 1 project in each of the first 3 units
- 1 exam at the end of the year

Certification: School End of Semester Reports.

Commitment: In order to succeed in this subject, students must have an in interest in solving digital problems using iPads, laptops, or lego robots. Students must be committed to completing all classwork, homework and assessment as required.

Cost: Refer to the schedule of fees.

Course Requirements: A laptop/ipad that meets school minimum specifications. A USB is required for backup, and earphones for a AV recordings.

Links to Careers: All careers and tertiary courses require Digital Technology knowledge and skills.

Intensive Fields: Information Technology, Computer Science, Data Science

Digital Technologies are part of every person's daily life whether at work or at play. Greater understanding and skills in this field allows our society to be safer, more productive and inclusive.

The emergence of social media, AI, cyber crime, data analysis and automation has accelerated the need for school leavers to be capable and critical users in the digital world.