

DIGITAL TECHNOLOGIES

HOW WILL I BENEFIT FROM STUDYING DIGITAL TECHNOLOGIES?

Digital Technologies empowers you to shape change by influencing how contemporary and emerging information systems and practices are applied to meet current and future needs. A deep knowledge and understanding of information systems enables you to be creative and discerning decision-makers when you select, use and manage data, information, processes and digital systems to meet needs and shape preferred futures.

Learning in Digital Technologies focuses on further developing understanding and skills in computational thinking, such as, precisely and accurately describing problems and the use of modular approaches to solutions. You will develop a range of thinking skills such as systems thinking, design thinking and computational thinking.

Digital Technologies provides you with authentic learning challenges that foster curiosity, confidence, persistence, innovation, creativity, respect, and cooperation. You will develop modular solutions to complex problems, and evaluate your solutions and existing information systems based on a broad set of criteria. You will consider the privacy and security implications of how data is used and controlled. Also, Digital Technologies provides you with practical opportunities to use design thinking and to be an innovative developer of digital solutions and knowledge.

The subject helps you to become an innovative creator of digital solutions, effective user of digital systems and critical consumer of information conveyed by digital systems.

WHAT ARE THE TOPICS IN YEAR 9?

- Systems & Data
- Digital Computer Networks & Cyber Security
- User Interface & User Experience Design
- Lego Robotics
- Algorithms
- Python coding

WHAT ARE THE TOPICS IN YEAR 10?

- Algorithms and Computational Thinking
- Python coding for game design and development
- Web Design – HTML5, CSS & Bootstrap
- Lego Robotics
- Data – Databases & SQL

WHAT IS THE ASSESSMENT?

The style of assessments used in Digital Technologies are based on providing solutions to IT scenario-based problems. They are projects, and students work on the tasks during class time.

THE CRITERIA YEAR 9 & 10 STUDENTS WILL BE ASSESSED ON ARE:

- Knowledge & Understanding
- Digital Systems
- Representation of Data
- Processes & Production Skills
- Collecting, Managing, & Analysing Data
- Defining
- Designing & Implementing
- Evaluating
- Collaborating & Managing

ASSESSMENT TASKS ARE BOTH INDIVIDUAL AND GROUP AND INCLUDE:

- Projects – product and documentation (multi-modal)
- Practical tasks
- Written tasks – tests, quizzes, and extended response tasks
- Portfolio of work samples