Subject name **Digital Solutions**
Subject code DIS
Subject type General
Subject fee Nil
Prerequisites Minimum C Year 10 Semester 2 General Maths and Minimum C General English/Literature

Course overview

Digital Solutions enables students to learn about algorithms, computer languages and user interfaces through generating digital solutions to problems. Students engage with data, information and applications to create digital solutions that filter and present data in timely and efficient ways while understanding the need to encrypt and protect data. They understand computing's personal, local and global impact, and the issues associated with the ethical integration of technology into our daily lives.

Students use problem-based learning to write computer programs to create digital solutions that: use data; require interactions with users and within systems; and affect people, the economy and environments. They develop solutions using combinations of readily available hardware and software development environments, code libraries or specific instructions provided through programming.

Students create, construct and repurpose solutions that are relevant in a world where data and digital realms are transforming entertainment, education, business, manufacturing and many other industries.

Course outline

Unit 1	Unit 2	Unit 3	Unit 4
Creating with code • Understanding digital problems • User experiences and interfaces • Algorithms and programming techniques • Programmed solutions	**Application and data solutions** • Data-driven problems and solution requirements • Data and programming techniques • Prototype data solutions	**Digital innovation** • Interactions between users, data and digital systems • Real-world problems and solution requirements • Innovative digital solutions	**Digital impacts** • Digital methods for exchanging data • Complex digital data exchange problems and solution requirements • Prototype digital data exchanges

Assessment

Units 1 and 2 are devised to replicate instruments used in Units 3 and 4. Assessments in Unit 1 and 2 are formative. In Units 3 and 4 students complete four Summative assessments. The results from each of the assessments are added together to provide a subject score out of 100. Students will also receive an overall exit subject result from QCAA that is A-E.

There is a combination of both practical work and theory-based tasks.

Summative assessments

Unit 3		Unit 4	
Summative internal assessment 1 • Investigation — technical proposal	20%	Summative internal assessment 3 • Project — folio	25%
Summative internal assessment 2 • Project — digital solution	30%	Summative external assessment • Examination	25%

Course requirements

BYOD Please refer to the Bring Your Own Device (BYOD) booklet for the minimum specifications required before purchasing a device.

Career opportunities

A course of study in Digital Solutions can establish a basis for further education and employment in the fields of science, technologies, engineering and mathematics.