

Information Technology:

Unit 1: IT in action

This unit focuses on how individuals use, and can be affected by, information and communications technology (ICT) in their daily lives. Students acquire and apply a range of knowledge and skills to create information that persuades, educates or entertains. They also explore how their lives are affected by ICT and strategies for influencing how ICT is applied. Students develop an understanding of the role technology plays in inputting, processing, storing and communicating data and information.

Unit 2: IT pathways

This unit focuses on how individuals and organisations, such as sporting clubs, charitable institutions, small businesses and government agencies use ICT. Students acquire and apply a range of knowledge and skills to create solutions and information products that meet personal and clients' needs. They also examine how networked information systems are used within organisations.

Students develop and apply knowledge and skills in using two different software tools. One tool must be a programming or scripting language that enables students to manipulate data, for example, Javascript, Actionscript, Visual Basic, Java, php. The other software tool should be selected from these types of software: web authoring and multimedia authoring, and, where appropriate, be supported by image editing software, such as Macromedia Flash and Adobe PhotoShop. Students also explore career pathways that involve using knowledge and skills associated with programming or scripting languages.

Working collaboratively in teams is an important and effective problem-solving strategy, and this strategy is applied when students solve information problems for clients in the community.

Unit 3: IT applications

Unit 3 focuses on how individuals or organisations use ICT to solve information problems and to participate actively in a society where use of ICT is commonplace. Students acquire and apply knowledge and skills in solving information problems to assist in decision-making and in managing tasks and timelines. The solutions and information products should meet the specific needs of organisations such as sporting clubs, newsagencies, charities, or the needs of individuals. Students also explore how the capabilities of networked information systems support teams of workers or learners to solve problems and share knowledge.

Unit 4: IT applications

This unit focuses on how ICT is used by organisations to solve ongoing information problems and in the strategies to protect the integrity of data and security of information. Students develop and acquire knowledge and skills in creating solutions and information products using spreadsheet software that can be re-used in the future with new sets of data. When solving information problems, students apply all of the problem-solving stages: analysis, design, development, testing, documentation, implementation and evaluation. Students apply their ICT knowledge and skills to record their decision-making strategies when solving information problems and to reflect on the effectiveness of these strategies.

In this unit students explore how organisations manage the storage, communication and disposal of data and information in order to minimise threats to the integrity of data and security of information, and to optimise efficient information handling.

