VCE Information Technology

Year 11
Unit 1: This unit focuses on how individuals and organisations 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 manipulate different data types such as numeric, text, sound and images (still and moving) to create solutions that can be used to persuade, educate, inform and entertain. Students also explore how their lives are affected by ICT, and consider strategies for managing how ICT is applied. They also examine how networked information systems allow data to be exchanged locally and within a global environment, and explore how mobile devices, such as phones, are used within these networks.

Unit 2: This unit focuses on how individuals and organisations use ICT to meet a range of purposes. Students apply a range of knowledge and skills to create solutions, including those that have been produced using a programming language, to meet users’ needs. In this unit, students apply all stages of the problem-solving methodology when creating solutions. Students analyse data from large repositories and manipulate selected data to create visualisations. They develop skills in using programming language software and they investigate careers that involve the use of these skills. and they investigate careers that involve the use of these skills. Working in teams is an important and effective strategy for solving problems for clients in the community.

Year 12 IT Applications

Unit 3: The focus of Unit 3 is the World Wide Web and how it supports the information needs of individuals, communities and organisations. The students investigate the design and technical underpinnings of different types of websites that support the varying needs of online communities. Students use web authoring software to create prototype websites for particular online communities, taking into account both technical and non-technical constraints. They focus on the use of a relational database management system (RDBMS). Examining techniques used by organisations to acquire data via websites and consider the relationship between how the data is acquired and the structure of an RDBMS.

Unit 4: In this unit students focus on how ICT is used by organisations to solve ongoing information problems and on the strategies used to protect the integrity and security of data and information. Spreadsheet software is used to create solutions to set information problems. In addition, students use web authoring or multimedia authoring software to produce onscreen user documentation. Students also explore how organisations manage the storage, communication and disposal of data and information in order to minimise threats to the integrity and security of data and information, and to optimise efficient information handling.

Year 12 IT Software Development

Unit 3: This unit focuses on programming as a strategy for solving problems for specific users in a networked environment. Students develop knowledge and skills in the use of the VB.NET programming language. When programming in Unit 3, students also develop an understanding of the problem-solving methodology. Students focus on the analysis stage of the problem-solving methodology, which involves
students developing and applying knowledge and skills in determining the requirements of solutions, identifying relevant factors that should be taken into account when designing the solutions, and in scoping the solutions.

**Unit 4:**
This unit focuses on how the information needs of individuals, organisations and society are and can be met through the creation of purpose-designed solutions in a networked environment. Students continue to study the programming VB.Net language. In this unit students are required to engage in the design, development and evaluation stages of the problem-solving methodology.
The students focus on the design and development stages of the problem-solving methodology when solving problems suitable for use with mobile devices.

**Assessment:** In Information Technology units 1 and 2 consists of 3 outcomes in each with two outcomes in each 3/4 units. Students need to satisfactorily complete each outcome in order to gain an S for each Unit of the subject. These Outcomes consist of both practical and written theory tasks.

**Suggested Pre-requisites:** There are no pre-requisites for the study of IT Applications Unit 3 and 4 although it is highly recommended that a student complete one unit 1 or 2 or complete VET cert II/III in IT. For Software Development a student must be able to demonstrate an ability to, or interest in, programming through the completion of a Unit 2 subject or the completion of bridging work set by the department. The bridging work consists of a self directed course in programming games using the selected language VB.NET.

**New VET Course**
VCE VET Interactive Digital Media program provides students with the knowledge and skills that will enhance their employment prospects within the media industry.
Year 11 Certificate II in Creative Industries (Media) Units 1 and 2 core units of competence include participating in health and safety processes, developing and applying create arts industry knowledge, working with others and applying critical thinking techniques. Electives available, which relate to interactive content, include multimedia, basic vision and sound editing.

**Year 12**
Certificate in Media include participating in occupational health and safety processes, producing and preparing photo images, working effectively in the screen and media industries. Electives may include creating 3D digital models, preparing audio assets, following a design process and producing drawings to represent and communicate the concept. The VCE VET Unit 3 and 4 sequence incorporates core units in preparing video assets, exploring and applying the creative design process to 2D forms, creating visual design component and authoring, programming interactive sequences.