

Information Technology Systems

Subject guide 2012

This subject guide relates to courses developed from the Information Technology Systems Senior Syllabus 2012.

Why study Information Technology Systems?

Information Technology Systems (ITS) is a practical discipline which prepares students to respond to emerging technologies and information technology (IT) trends. Students develop the knowledge of, and skills in, the systems supporting IT. Systems range from those supporting the development of information, such as documents or websites, to those supporting technology, such as computers or networks.

Information Technology Systems prepares students to cope with, and harness to their advantage, the changes and significant opportunities associated with IT. This subject may lead to employment in such areas as IT support, graphic and multimedia manipulation, or tertiary study in the fields of multimedia design, games design, website design and animation.

What is studied?

Subject matter in Information Technology Systems is organised in five interwoven elements:

- Theory and techniques
- Problem-solving process
- Project management
- Client relationships
- Social and ethical issues.

Contexts provide a focus for developing the subject matter into units of work. They include:

- Animation
- Game design
- Graphic design
- Interactive media
- Mobile technology
- Multimedia
- Networking
- Video production
- Web design.

How do students learn?

Students of Information Technology Systems engage in a variety of practical learning experiences in a mostly project-based course of study. Students will:

- retrieve information from databases
- design, implement, test, evaluate and write documentation for information systems and other computer programs
- participate in class discussions, role- plays, dilemmas and scenarios
- install and maintain a variety of software applications and operating systems
- design, develop and evaluate software or hardware to meet client requirements
- generate helpdesk materials
- develop websites
- design, develop and evaluate games and other multimedia products
- undertake case studies to solve real IT problems.

How are students assessed?

Students are assessed against standards described in terms of:

- *Knowledge and communication*
- *Design and development*
- *Implementation and evaluation.*

Knowledge and communication refers to the comprehension, understanding and communication of the terms, concepts, principles and design processes associated with information technology.

Design and development involves determining the intended purpose, the needs of the client and proposing and testing possible solutions. It requires research, analysis, synthesis and ongoing testing related to the process of design and development and the associated documentation.

Implementation and evaluation focuses on the quality of the solution. Quality and effectiveness are evaluated against client needs and defined criteria formulated during the design and development phase.

Assessment techniques used by schools include short and/or extended responses, research assignments, projects and practical exercises. Multimodal presentations such as seminar presentations, multimedia presentations and reports may also be used.

How can parents help?

Parents and caregivers can help students by:

- providing a supportive environment in the home
- showing a daily interest in what students are doing
- encouraging them in their learnings.

They should also encourage their child to read widely on the subject, share a personal interest in recent developments in IT, discuss relevant media reports on topical IT issues and encourage critical responses.

Parents and caregivers might also consider:

- perusing the ITS syllabus from which schools plan their programs of work
- discussing the school work program with the teacher
- discussing the student's progress with the student and relevant school personnel.

More information

If you would like more information, please email senior.syllabuses@qcaa.qld.edu.au. You can also visit the QCAA website www.qcaa.qld.edu.au and search for 'Information Technology Systems'.