In its documentation the Ministry of Education and Training, Victoria has stated a commitment to providing learning environments where information technology can be investigated from Prep to Year 12.

The expressed aim is that students will leave school familiar with the basic elements and functions of information technology. Programs provided should allow students to "develop competence with computers and information technology and understand their social effects, and appropriate those aspects of technology which contribute to learning... and...be aware of the applications of science and technology, of their social and environmental impact, and of the responsibilities which are associated with having the power to alter environments." Ministerial Paper No.6, Curriculum Development and Planning in Victoria, p19, 1984.

Policy is set out in:
- Ministerial Paper No.6 Curriculum Development and Planning in Victoria, 1984
- "Computers in Schools" policy statement issued, October 1983, and

CURRICULUM

In 1988 the Curriculum Frameworks documents began to be published. They aimed at giving schools support for planning, developing and reviewing their programs to ensure that a comprehensive curriculum was provided by all schools.

There are nine curriculum Frameworks areas from Years P-10:
- English (including English as a Second Language)
- LOTE (Languages Other Than English)
- Technology Studies
- Social Education
- Personal Development
- Science
- Commerce
- The Arts
- Mathematics

The School Curriculum and Organisation Framework: P-12 (that provides the overall link) has a chapter setting out teaching and learning strategies appropriate for good teaching practice. They recommend the following approaches:
1. Actively involve students in their learning;
2. Build upon students' experiences and interests;
3. Link theory to practice;
4. Foster communication and cooperation in learning;
5. Encourage risk taking and learning from errors.

Schools are expected to work at developing these type of strategies and environments and many are using information technology experiences as their basis.

Information technology was to be taught in the context of these Frameworks areas. Although several Frameworks documents discuss computer applications, appropriate to their specific area, this has not been addressed in depth. Many applications have not been explored.

At the Victorian Certificate of Education (VCE) level the following documents are added to the Frameworks areas:

Information Technology Study Design/Curriculum Design Support Materials (CDSM);
Technology Studies Study Design/Curriculum Design Support Materials (CDSM);

Information Technology is the only field of study in which computer use is mandatory. VCE Mathematics refers frequently to its use.

VCE supports the provision of a comprehensive curriculum for remote areas and for large bases such as Australian Studies electronic classes and sharing of resources is encouraged.

District Provision, Whole School Planning and the Social Justice Framework documents recognise the need for planning for appropriate use of information technology within Victorian schools.

VICTORIA CERTIFICATE OF EDUCATION (VCE) INFORMATION TECHNOLOGY FIELD OF STUDY

Information Technology combines a number of previously offered subject areas. For example: Secretarial Studies, Computer Science, Electronic Data Processing, Advanced Typing. A description of the VCE Information Technology area of study has been taken from the Information Technology Study Design and the Course Development Support Material.

Purpose and Aims of the Study
"IT is designed to enable students to learn how to apply information technology, learn about its power and scope as well as limitations, and
develop the knowledge, skills and confidence to ensure that they and society benefit from what IT offers.

This study is designed to enable students to:

• acquire and apply problem-solving and decision making skills using information processing equipment;
• evaluate various possibilities and consequences of using information technology, as they relate to individuals, organisations and society;
• acquire and apply knowledge and skills relating to the acquisition, structure, validation, processing, management and communication of information;
• identify and investigate the people, procedures and equipment associated with information handling;
• understand the components and structure of information processing equipment;
• apply information - handling knowledge and skills to all learning.

Structure of the Study
The field of IT offers one study consisting of eight units:

1. Information Technology 1
2. Information Technology 2
3. Info. Processing and Management 3
4. Info. Processing and Management 4
5. Information Systems 3
6. Information Systems 4
7. Information Technology in Society 3
8. Information Technology in Society 4

Students may take Unit 1 and/or Unit 2 and may take one, two or three of the sequences of semesters 3 and 4 level units.

There are three key aspects of IT which are explored in each unit. They are:

• application: learning to make decisions and solve problems using information-processing equipment
• technology: learning about information systems and how they operate
• implications: examining ways in which individuals, organisations and society influence and are effected by developments in information technology. In Units 3 and 4 the relative importance assigned to each aspect varies according to the focus of the sequence. In units 1 and 2 equal weighting is given to all aspects.

Units 1 and 2 are designed to provide a broad and balanced approach to IT whilst 3 and 4 focus on one aspect in depth.

Unit 1 - Areas of study
1. Information Technology: What, Why and Where
2. Information: The Vital Ingredient
3. Components of Computer Systems
4. Solving Problems
5. Processing Information
6. Impact and Action

Unit 1 - Work Requirements
1. Applied Processing Folio
2. Integrated Project
3. Research Project

Unit 2 - Areas of Study
1. Information Systems: Where, What and Why
2. Characteristics of Information Systems
3. Processing Information
4. Problems and Possibilities

**Relationships - Work Requirements, Areas of Study & Common Assessment Tasks**

**Units 3 and 4: Information Processing and Management**

<table>
<thead>
<tr>
<th>Work Requirement</th>
<th>Related Area of Study</th>
<th>Related CATs</th>
</tr>
</thead>
</table>
## Units 3 and 4: Information Systems

<table>
<thead>
<tr>
<th>Work Requirement</th>
<th>Related Area of Study</th>
<th>Related CATs</th>
</tr>
</thead>
</table>
| 1. Problem Solving Project             | Unit 3  
1. Data Structures & Prob. Solving                      | will relate to CAT 3.                  |
| 2. Hardware Design                     | 2. Hardware & Software Comp/nts                            | no directly related CAT                |
|                                        | all Areas of Study                                         |                                       |

<table>
<thead>
<tr>
<th>Work Requirement</th>
<th>Related Area of Study</th>
<th>Related CATs</th>
</tr>
</thead>
</table>
| 1. Problem Solving Project             | Unit 4  
1. Problem Solving & Programming Languages              | CAT 3. Problem Solving                 |
| 2. Futures Project                     | 2. Information Systems: Structure & Effectiveness          | no directly related CAT                |

## Units 3 and 4: Information Technology in Society

<table>
<thead>
<tr>
<th>Work Requirement</th>
<th>Related Area of Study</th>
<th>Related CATs</th>
</tr>
</thead>
</table>
| 1. Applied Processing Folio             | Unit 3  
1. Information Technology Now  
2. Information Processing and Information Systems | no directly related common assessment task |
| 2. History Project                     | 1. Information Technology Now  
| 4. Impact Research Project             | 1. Information Technology Now  
4. Impact of Info Technology              | no directly related common assessment task |
|                                        | 2. Info Technology in the Future                           |                                       |
|                                        | 2. Info Technology in the Future  
3. Controlling Information Technology     | CAT 2. Information Processing Task      |
|                                        | 1. Images of the Future  
2. IT in the Future                              | CAT 3. Action Plan                     |
|                                        | 1. Images of the Future  
2. IT in the Future                              | CAT 4. Structured Questions            |
Unit 2 - Work Requirements
1. Applied Processing Folio
2. Information Project
3. Impact Project

Software Types
Students may use a variety of software types, eg. wordprocessors, databases, spreadsheets, graphics, disc-operating systems, programming languages, desktop publishing, applications packages, telecommunications, statistical software. This list is not exhaustive. Integrated packages should be regarded as three functionally different software types.

In selecting software consideration should be given to:
- the statement 'different software types' does not mean different brands;
- the distinction between wordprocessing and desktop publishing are becoming more blurred as advances occur in software development. Use as your guide the primary function of the software;
- some database packages allow some programming by the user. These packages may be used in IT either as databases or programming languages. For the purposes of this study they cannot be claimed as two different software types;
- in Units 3 & 4 Information Systems, students must study one imperative and one non-imperative language.

Entry to the Study
There are no prerequisites for entry to Units 1, 2 and 3. Students are advised to take Unit 1 or 2 (preferably both) or attain equivalent experience before entering a sequence of Units 3 and 4. Each pair of Units 3 and 4 are designed to to be taken as a sequence and students must undertake Unit 3 prior to Unit 4. Keyboarding skills are recommended.

Duration
Each unit consists of approximately 100 hours of study. It is expected that 50-60 hours will be offered as class time.

Assessment and Reporting
Units 1 and 2
To satisfactorily complete a unit of study, the student must satisfactorily complete all the work requirements for the unit in accordance with the specifications in the study design. Assessment of satisfactory is to be made by the school.

Units 3 and 4
To satisfactorily complete a unit of study, the student must satisfactorily complete all the work requirements for the unit in accordance with the specifications in the study design. Assessment of satisfactory is to be made by the school.

At Units 3 and 4 the Victorian Curriculum and Assessment Board supervise the assessment of the levels of performance. This will be done by the completion of four graded Common Assessment Tasks for each unit undertaken.

References
The School Curriculum and Organisation Framework: P - 12, Ministry of Education (Schools Division), Victoria, 1988.

Information Technology Study Design, Victorian Curriculum and Assessment Board, Victoria, November 1990.

Information Technology Course Development Support Material, Victorian Curriculum and Assessment Board, Victoria, April 1990.