



## Information Processes and Technology

### STAGE 6 HSC ~ COURSE OUTLINE

Information Processes and Technology is the study of computer-based information systems. It focuses on information processes performed by these systems and the information technology that allows them to take place. Social, ethical and non-computer procedures resulting from the processes are considered. Different types of information systems are studied. Through project work, students will create their own information system to meet an identified need.

#### MAIN TOPIC COVERED

##### HSC Course

##### Project Management (20%)

- Techniques for managing a project
- Understanding the problem
- Planning
- Design solutions
- Implementing
- Testing, evaluating and maintaining

##### Information Systems and Databases (20%)

- Information Systems
- Database information systems
- Organisation
- Storage and retrieval
- Other information processes
- Issues related to information systems

##### Communication Systems (20%)

- Characteristics of communication systems
- Examples of communication systems
- Transmitting and receiving in communication systems
- Other information processes in communication systems
- Managing communication systems
- Issues related to communication systems

##### Option Strands (40%)

*Students will select two of the following options:*

- Transaction processing systems
- Decision support systems
- Automated manufacturing systems
- Multimedia systems

#### SYLLABUS OUTCOMES

- H1.1** Applies and explains an understanding of the nature and function of information technologies to a specific practical situation
- H1.2** Explains and justifies the way in which information systems relate to information processes in a specific context
- H2.1** Analyses and describes a system in terms of the information processes involved
- H2.2** Develops and explains solutions for an identified need which address all of the information processes
- H3.1** Evaluates and discusses the effect of information systems on the individual, society and the environment
- H3.2** Demonstrates and explains ethical practice in the use of information systems, technologies and processes
- H4.1** Proposes and justifies ways in which information systems will meet emerging needs

- H5.1** Justifies the selection and use of appropriate resources and tools to effectively develop and manage projects
- H5.2** Assesses the ethical implications of selecting and using specific resources and tools, recommends and justifies the choices
- H6.1** Analyses situations, identifies needs, proposes and then develops solutions
- H6.2** Selects, justifies and applies methodical approaches to planning, designing or implementing solutions
- H7.1** Implements and explains effective management techniques
- H7.2** Uses methods to thoroughly document the development of individual and team projects

### BOSTES Assessment Information

External examination	Marks	Internal assessment	Weighting
Section I – Core Objective response questions	20	A. Project Management	20%
Section II – Core Short-answer questions	40	B. Information Systems and Databases	20%
Section III – Options Candidates answer two questions on the options they have studied	40	C. Communication Systems	20%
		D. Option Strands	40%
<b>TOTAL MARKS</b>	<b>100</b>	<b>TOTAL MARKS</b>	<b>100%</b>

### School Based Evidence of Learning ~ Formal Task Schedule

Task No.	Targeted Outcomes	Learning Context	Task	Date Due	Weighting				Marks
					A	B	C	D	
1	H – 1.1, 6.2	Information Systems and Databases	Database Task	T4 Wk 7		10%		5%	15%
2	H – 2.2,3.2, 4.1, 5.1, 5.2, 6.1, 6.2, 7.1, 7.2	Information systems and data bases – Project management	Mid-Course Test	T1 Wk 3	5%	5%	5%	5%	20%
3	H – 6.1, 7.1, 7.2	Project management	Major Project	T1 Wk 8	10%		5%	10%	25%
4	H – 1.1, 1.2, 2.2, 3.1, 3.2, 4.1, 5.1, 5.2, 6.1, 6.2, 7.1, 7.2	All areas	Trial HSC Examination	T2 Wk 9/10	5%	5%	10%	20%	40%
<b>TOTAL</b>					<b>20%</b>	<b>20%</b>	<b>20%</b>	<b>40%</b>	<b>100%</b>