

## 615-AA Bachelor of Information Systems

<b>Year and Campus:</b>	2008																			
<b>Fees Information:</b>	Subject EFTSL, Level, Discipline & Census Date, <a href="http://enrolment.unimelb.edu.au/fees">http://enrolment.unimelb.edu.au/fees</a>																			
<b>Level:</b>	Undergraduate																			
<b>Duration &amp; Credit Points:</b>																				
<b>Contact:</b>	Faculty of Science Office Ground Floor Old Geology Building University of Melbourne Victoria 3010 AUSTRALIA Telephone +61 3 8344 6404 Facsimile +61 3 8344 5803																			
<b>Course Overview:</b>	The degree in information systems focuses on the design, specification, and creation of information systems, and on the human and organisational arrangements needed to use information systems to achieve organisational goals. To cover these increasingly interrelated topics, the course offers study in five key areas: information systems, information technology, organisations, analytical skills, and professional competencies.																			
<b>Objectives:</b>	The objective of the Bachelor of Information Systems course is to prepare students to be part of teams that imagine, specify, design, justify, build, implement, manage and use information systems. To accomplish this objective, graduates must understand how to use information technology, including hardware, software, and telecommunications, as a conduit for the value-added information content of formal organisational systems. This understanding is based on a solid theoretical grounding in both technology and organisations, as well as on experience working both individually and in teams to apply the theory to practice.																			
<b>Subject Options:</b>	<p>Students must complete a minimum (and maximum) of 300 points of approved studies, comprising:</p> <ul style="list-style-type: none"> <li># 187.5 points of core subjects in information systems at 100, 200, and 300-level (or approved alternatives);</li> <li># 25 points of information systems elective subjects at 300-level;</li> <li># a 12.5 point subject in a business-oriented discipline (see below for list of options)</li> <li># 75 points of elective subjects including at least 37.5 points at 200 or 300-level;</li> </ul> <p>Students may not undertake more than 112.5 points at 100-level towards this course.</p> <p><b>Compulsory core information systems subjects (100-level)</b>            Compulsory 100-level information systems subjects (or approved alternatives): 615-110, 615-140, 615-145, 615-150, 615-160*.            615-160 Tools of Analysis will not be offered after 2007. Approved alternative subjects are 800-101, 316-130 or any 100-level subject taught by the Department of Mathematics and Statistics (except for Introductory Mathematics which is reserved for students who have not completed VCE Unit 3/4 Mathematical Methods or equivalent).            615-140 and 615-145 will be offered for the last time in 2008 and will only be available to students invited by the Head of Department.            From 2008 the sequence of 615-145 and the 200-level subject 615-240 will be replaced by 600-151 Informatics 1: Practical Computing and 600-152 Informatics 2: People, Data and the Web.            From 2008 the sequence of 615-140 and the 200-level subject 615-230 will be replaced by two alternative new subjects to be available from 2009 (Shaping the Enterprise with ICT and Informatics 3: Content Management).            Students who had not completed either 615-140 or 615-145 prior to 2007 are required to complete the first year sequence 600-151 and 600-152.            Students who had completed 615-140 in 2007 or earlier, but not 615-145, will be required to undertake 600-151 and 600-152 from 2008.</p> <table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>615-110 Foundations of Information Systems</td> <td>Semester 1</td> <td>12.50</td> </tr> <tr> <td>615-140 Technologies for Information Systems</td> <td>1</td> <td>12.500</td> </tr> <tr> <td>615-145 Concepts in Software Development I</td> <td>Summer, 1</td> <td>12.500</td> </tr> <tr> <td>615-150 Organisational Processes</td> <td>Semester 2</td> <td>12.50</td> </tr> <tr> <td>600-151 Informatics 1: Practical Computing</td> <td>Semester 1, Semester 2</td> <td>12.50</td> </tr> </tbody> </table>		Subject	Study Period Commencement:	Credit Points:	615-110 Foundations of Information Systems	Semester 1	12.50	615-140 Technologies for Information Systems	1	12.500	615-145 Concepts in Software Development I	Summer, 1	12.500	615-150 Organisational Processes	Semester 2	12.50	600-151 Informatics 1: Practical Computing	Semester 1, Semester 2	12.50
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600-152 Informatics 2: People, Data and the Web	Semester 1, Semester 2	12.50
800-101 Critical Thinking With Data	Semester 1	12.50
316-130 Quantitative Methods 1	Semester 1, Semester 2	12.50

### Compulsory core information systems subjects (200-level)

Compulsory 200-level information systems subjects (or approved alternatives): 615-230, 615-237, 615-240, 615-245, 615-251, 615-252.

615-230 and 615-240 will be offered for the last time in normal mode in 2008.

From 2009 the subject 615-230 will be replaced by Informatics 3: Content Management; and the subject 615-240 will be replaced by 600-152 Informatics 2: People, Data and the Web.

Subject	Study Period Commencement:	Credit Points:
615-230 Database Concepts	1	12.500
615-237 Telecommunications Concepts	Semester 2	12.50
615-240 Concepts in Software Development II	Semester 1	12.50
615-245 Systems Analysis and Design	Semester 2	12.50
615-251 Organisational Analysis and Change	Semester 1	12.50
615-252 Electronic Commerce	2	12.500

### Compulsory core information systems subjects (300-level)

Compulsory 300-level information systems subjects.

Subject	Study Period Commencement:	Credit Points:
615-346 Information Systems Architecture	Semester 1	12.50
615-355 Professional Issues in Info Systems	Semester 2	12.50
615-372 Project Management	Semester 1	12.50
615-373 Industrial Project	Semester 1, Semester 2	12.50

### Elective information systems subjects (200-level)

Elective 200-level information systems subjects.

Subject	Study Period Commencement:	Credit Points:
615-260 Enterprise Systems	2	12.500
615-280 Multimedia and Communications	1	12.500

### Elective information systems subjects (300-level)

Elective 300-level information systems subjects.

Subject	Study Period Commencement:	Credit Points:
615-330 Advanced Concepts in Database	Semester 2	12.50
615-348 Human Computer Interaction	Semester 1	12.50
615-351 Strategic IS Management	Semester 1	12.50
615-360 Organisational Information Security	Semester 1	12.50
615-363 Mobile Computing Applications	Semester 2	12.50
615-380 Multimedia Design for Info. Systems	2	12.500

## Business-oriented subjects

Bachelor of Information Systems students select one business-oriented subject from this list. Some of these subjects have prerequisites.

Subject	Study Period Commencement:	Credit Points:
306-108 Accounting Transactions and Analysis	Semester 1, Semester 2, Summer	12.50
316-101 Introductory Macroeconomics	Semester 1, Semester 2	12.50
316-102 Introductory Microeconomics	Semester 1, Semester 2	12.50
333-101 Finance 1	Semester 1, Semester 2, Summer	12.50
325-101 Managing People and Organisations	Semester 1, Semester 2, Summer	12.50
325-102 Business in the Global Economy	Not offered 2008	12.50
732-103 Principles of Business Law	Semester 1, Semester 2	12.50

### Entry Requirements:

A study score of at least 25 in each of English (any) and Mathematical Methods (either). The VCE Mathematical Methods prerequisite for a course can be satisfied by the completion of Specialist Mathematics at the required level.

### Core Participation Requirements:

It is University policy to take all reasonable steps to minimise the impact of disability upon academic study and reasonable steps will be made to enhance a student's participation in the University's programs. Students who feel their disability may impact upon their active and safe participation in a subject are encouraged to discuss this with the relevant subject coordinator and the Disability Liaison Unit.

### Further Study:

An honours option is available for graduates of the Bachelor of Information Systems through the Bachelor of Information Systems (Degree with Honours) course.

### Graduate Attributes:

Upon completion of the Bachelor of Information Systems course, students should: understand how people use information and information systems; understand the business value of information and information systems in organisations; understand the organisational settings in which information systems are used, including major business functions and processes; have familiarity with, and some experience in, studying large, complex information systems; understand, and be able to specify, the technical aspects of an information system; be able to build small information systems; be familiar with a range of techniques, standards, and tools for building and using large information systems in an organisational setting; be able to participate in imagining, designing, justifying, implementing, and managing large information systems; have professional competencies for effective work in organisations, including listening, writing, researching, analysing, presenting, and working in teams; and know how to operate ethically within society's legal framework.

### Generic Skills:

Specific capabilities will be developed through work in the five key areas of the course.

1. Information systems  
This is the central theme of the course: information systems collect, process, store, and distribute information so that it can be used to make decisions, to keep track of resources, and to plan for the future. Particular focus is placed on imagining, specifying, designing, justifying, building, implementing, managing, and using information systems to add value in organisations.
2. Information technology  
An understanding of the potential of information technology to add value is essential to the successful implementation and use of information systems. Students will become familiar with computer hardware and software, telecommunications, databases and data structures, information technology architectures, and information technology infrastructures. Practical experience in these areas will help students learn how to assess the current and future capability of information technology.
3. Organizations  
To implement information systems efficiently and effectively in organisations requires the ability to analyse and understand organisational functions, processes, environments, characteristics,

and cultures. This organisational perspective on information systems, and its relationship to the technical perspective developed in the information technology theme, is a distinguishing characteristic of the Bachelor of Information Systems course.

#### 4. Analytical skills

Effective design, development, and implementation of information systems in organisations requires a broad range of analytical skills, including data classification and modelling, information mapping and representation, systems analysis and design, and statistics. These and other analytical skills are essential for understanding, and communicating about, complex organisational situations and the potential and performance of information systems.

#### 5. Professional competencies

Graduates will, in the course of their jobs, work with people across a broad spectrum of technical and business interests and skills. Success in these interactions will require a well-developed set of personal competencies, including listening, collecting and synthesising information, writing, presenting, and working in teams.