

Faculty of Engineering and Faculty of Science

Diploma in Informatics

1 Background

The Diploma in Informatics will provide students in almost all areas of study with the option of complementing their principal major with a program in the IT area designed to give them familiarity with a range of data manipulation and presentation techniques. The delivery format, via a concurrent diploma, is designed to build on and extend their main study, and students will be expected to bring problems and challenges from their main study area to their Diploma subjects.

Students who have completed the Diploma in Informatics will be eligible to apply for entry to the Master of Information Technology. It is anticipated that as we review the Masters programs on offer in 2008 and beyond that other options will also become available.

Students will apply to enter the Diploma only after the first 50 points of study towards the Diploma have been completed. Upon being granted entry, students will be awarded 50 points of credit, and be required to complete a further 50 points to make up the total requirement of 100 points. Two possible pathways into the Diploma are envisaged – a standard pathway and a “fast track” pathway.

In the standard pathway, students complete 50 points of Informatics (including the two first year subjects, and two second year subjects) as either Breadth or core in their underlying degree, and apply for entry to the Diploma at the completion of their three-year NG degree. One further semester of study is then required.

In the “fast track” structure, students apply for entry to the Diploma at the end of their second year of study, having overloaded by two subjects during that second year. By again overloading in their third year, they are able to complete the Diploma in six semesters. Permission to enrol in the fast-track structure is contingent on an H2B (70%) average in the preceding semester, and on any degree-specific restrictions in connection with overloading.

All students enrolled in a NG degree and the Diploma in Informatics are required to complete a minimum of 350 points of total enrolment before the Diploma is awarded.

Students in the BSc majoring in any of Computer Science, Science Informatics, Software Systems would not be permitted to enrol in the Diploma in Informatics.

2 Course/Program Objectives

Upon completion of the Diploma in Informatics, students will:

- Be able to demonstrate their understanding of the way information and communication technologies support integration of data from diverse sources;
- Be able to apply modern concepts and techniques to problems involving the acquisition, storage, manipulation, and presentation of data;
- Be able to critically analyse the information flows occurring in real world data sharing situations and be able to design supporting on-line or web-based solutions; and
- Be able to provide informed advice to people in other disciplines about how best to implement on-line or web-based solutions to problems involving the acquisition, storage, manipulation, or presentation of domain-specific data.

3 Entry Requirements

Recommended separately by Academic Board.

4 Course/Program Structure

Two pathways are envisaged: in the BA, BCom, BEnvS, and BMus, via a minimum of 50 points of breadth study in Informatics, plus 50 points of additional Informatics electives to a total of 100 points; and in the BSc, via a minimum of 50 points of core study in Informatics, plus 50 points of additional Informatics electives to a total of 100 points. At this time the rules of the BBiomed preclude either of these two options.

The standard pathway through the Diploma in Informatics consists of one subject per semester for four of the first six semesters, followed by a seventh semester of study containing a further four subjects. Students in this pathway will not enrol in the Diploma until they are ready to commence the seventh semester of study.

	Subject 1	Subject 2	Subject 3	Subject 4
1	<i>This block: 225 points (18 subjects) of other NG degree study, leading to a major as prescribed by the rules of that program, and including (in the BSc) a further 50 points of breadth.</i> <i>Programs available: BA, BCom, BEnvS, BMus, BSc. In the BSc, the major may not be Computer Science, Science Informatics, or Software Systems.</i>			100 Informatics 1
2				100 Informatics 2
3				200 Informatics 3
4				Breadth
5				200 Info elctv
6				Breadth
7	300 Informatics 6	2/300 Info elctv	300 Info elctv	300 Info elctv

The accelerated six-semester “fast track” sequence will be available to students who demonstrate their engagement with University study by obtaining the necessary degree-specific average mark during their first year of enrolment, and are then willing/permitted to overload in subsequent semesters. These students will enrol in the Diploma at the commencement of their third year.

	Subject 1	Subject 2	Subject 3	Subject 4	Subject 5
1	<i>This block: 225 points (18 subjects) of other NG degree study, leading to a major as prescribed by the rules of that program, and including (in the BSc) a further 50 points of breadth.</i> <i>Programs available: BA, BCom, BEnvS, BMus, BSc. In the BSc, the major may not be Computer Science, Science Informatics, or Software Systems.</i>			100 Informatics 1	
2				100 Informatics 2	
3				200 Informatics 3	200 Info elctv
4				Breadth	2/300 Info elctv
5				300 Informatics 6	300 Info elctv
6				Breadth	300 Info elctv

Diploma subjects

The further 50 points completed once students enrol in the Diploma will comprise *Informatics 6: e-Research Project* (a 300-level capstone subject, specifically designed for the Diploma of Informatics); and another 37.5 points of 200- or 300- level subjects offered within the study areas of Computer Science (COMP), Science Informatics (SINF), Software Systems (SWEN), all offered within the core of the BSc, and Information Systems (ISYS), an area of study that is not included in the core of any of the New Generation degrees but is instead available as breadth. Of these 37.5 points of study at least 25 points must be at 300-level. The set of eligible subjects is referred to collectively as “Informatics electives” or “Info elctv” in the tables above, and in the remainder of this document.

A final constraint on students' subject choice is that *Informatics 6* will be credit excluded with the capstone subjects provided to the COMP, SINF, SWEN, and ISYS study areas. As the range of 300-level Informatics electives available to a particular student will depend on the set of 200 level Informatics electives that student has completed, course advice *prior* to Diploma enrolment will be necessary to ensure each "fast track" student has access to their preferred 300-level Informatics electives in their third year. Note that both sequences allow students in the BA, BCom, BEnvS, and BMus to retain 25 points of further Breadth, to be applied in any manner consistent with the rules governing the use of Breadth in those degrees.

The Diploma in Informatics consists of four compulsory subjects (*Informatics 1: Practical Computing; Informatics 2: People, Data and the Web; Informatics 3: Content Management; and Informatics 6: eResearch Project*) and four electives. Two further Informatics subjects, *Informatics 4: Web Applications* and *Informatics 5: Applied Analytics*, are available as electives; these two 300-level subjects have the single prerequisite of *Informatics 3: Content Management* and provide a straightforward pathway to the "minimum of 37.5 points of 300-level study in Informatics" completion requirement of the Diploma.

The list of Informatics subjects that will be offered to Diploma in Informatics students is:

Compulsory

Students must complete all four of:

- Informatics 1: Practical Computing
- Informatics 2: People, Data, and the Web
- Informatics 3: Content Management
- Informatics 6: eResearch Project

(Informatics 1 and 2 are under 600-xxx numbers in the old system, and all Informatics subjects will be included under the INFO- prefix in the new subject labelling system).

Electives

Students must complete four subjects (50 points) including at least two subjects (25 points) at 300-level, from the range of 200 and 300 level subjects offered within the study areas of Computer Science (COMP), Science Informatics (SINF), Software Systems (SWEN) and Information Systems (ISYS). In addition the two subjects:

- Informatics 4: Web Applications
- Informatics 5: Applied Analytics

may be taken as electives.

Individual 300-level Informatics electives have various 200 level prerequisites that must be fulfilled, and students must consider the 200-level prerequisites required for a particular set of 300 level electives. It is envisaged that course advice will be the vehicle for aiding students with these decisions, particularly for fast track students, who must select 200-level Informatics electives before enrolling in the Diploma. Note also that the 200-level Informatics elective Algorithms and Programming (COMP area of study) has an additional 100-level Mathematics prerequisite not included within the Diploma structure. Students who do not undertake the necessary 100-level Mathematics subject as core or breadth study outside the points envelope of the Diploma will not be able to access COMP and SWEN subject choices at 200- and 300-level.

5 Availability of Course

The first intake will be in 2010. The course will be available to part-time and full-time CSP and full-fee paying Australian and international students.