355-AB Bachelor of Engineering (Chemical and Biomolecular Engineering)

Year and Campus:	2008
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Level:	Undergraduate
Duration & Credit Points:	
Contact:	-
Course Overview:	Following the introduction of the chemical engineering degree in 1952, graduates from the Department of Chemical and Biomolecular Engineering have been rapidly accepted into industry, both in Australia and worldwide. Graduate Chemical and Biomolecular Engineering starting salaries are higher then any other engineering discipline. Chemical and Biomolecular Engineering is concerned with developing and analysing process systems, which are strongly dependant upon chemistry and involve physical changes, Out graduates find employment in the biochemical industry, the food industry, as well as in the traditional chemical industry. Chemical and Biomolecular Engineers are well suited for environment-related engineering positions given their strong background in process systems and in chemical biological processes in particular. The single degree, Bachelor of Engineering (Chemical and Biomolecular Engineering), requires the completion of 400 points over four years.
Objectives:	-
Course Structure & Available Subjects:	When setting the timetable every effort will be made to avoid clashes between the times of classes associated with these sets of subjects. Students should be aware, however, that if it proves to be impossible to achieve a timetable without clashes in these sets of subjects the Faculty reserve the right to modify course structures in order to eliminate the conflicts. Students will be advised during the enrolment period of the semester if the recommended courses need to be varied.
Subject Options:	**First Year (2008 Entry)** *Note: Students who have successfully completed VCE Specialist Maths should enrol into:* **620-155 Calculus 2** in semester 1; and **620-156 Linear Algebra** in semester 2 Subjects listed below **MUST** be taken in this approved order, regardless of semester availability.

Semester 1

Subject	Study Period Commencement:	Credit Points:
800-001 Engineering Systems Design 1	Semester 1, Semester 2	12.50
620-154 Calculus 1	Semester 1, Semester 2	12.50
610-101 Chemistry 1	Semester 1, Semester 2	12.50

Breadth subject (http://handbook.unimelb.edu.au/breadth/index.html) (12.5 points)

Semester 2

Subject	Study Period Commencement:	Credit Points:
800-002 Engineering Systems Design 2	Semester 2, Summer	12.50
620-155 Calculus 2	Semester 1, Semester 2	12.50
610-102 Chemistry 2	Semester 2, Summer	12.50

PLUS Breadth subject (http://handbook.unimelb.edu.au/breadth/index.html) (12.5 points)

THE COURSE STRUCTURE BELOW ONLY APPLIES TO RE-ENROLLILNG STUDENTS WHO COMMENCED THEIR STUDIES PRIOR TO 2008

Second Year

Subjects listed below **MUST** be taken in this approved order, regardless of semester availability.

Semester 1

Subject	Study Period Commencement:	Credit Points:
411-201 Introduction to Transport Processes	Semester 1	12.50
431-201 Engineering Analysis A	Semester 1	12.50
610-221 Organic & Bio-organic Chemistry	Not offered 2008	12.50
411-254 Biomolecular Process Principles	Semester 1	12.50

Semester 2

Subject	Study Period Commencement:	Credit Points:
411-203 Fluid Mechanics	Not offered 2008	12.50
431-202 Engineering Analysis B	Summer, 1, 2	12.500
411-204 Chemical Engineering Thermodynamics	Semester 2	12.50
411-255 Metabolic Engineering	Semester 2	12.50

Third Year

Subjects listed below **MUST** be taken in this approved order, regardless of semester availability.

Semester 1

Subject	Study Period Commencement:	Credit Points:
411-303 Reactor Engineering	Semester 1	12.50
411-331 Heat and Mass Transport Processes 1	Semester 1	12.50
411-343 Chemical Engineering Management	Semester 1	12.50
411-392 Fermentation Process Engineering	Semester 1	12.50

Semester 2

Subject	Study Period Commencement:	Credit Points:
411-336 Process Dynamics and Control	Semester 2	12.50
411-337 Practical and Computer Laboratory	Semester 2	12.50
411-339 Process Engineering 2	Semester 2	12.50
411-391 Bionanoengineering	Semester 2	12.50

Fourth Year

Subjects listed below **MUST** be taken in this approved order, regardless of semester availability.

Semester 1

Subject	Study Period Commencement:	Credit Points:
411-441 Heat and Mass Transport Processes 2	Semester 1	12.50
411-442 Process Equipment Design	Semester 1	12.50
411-432 Particle Mechanics and Processing	Semester 1	12.50
411-445 Process Engineering 3	Semester 1	12.50

Semester 2

Subject	Study Period Commencement:	Credit Points:
411-451 Biomolecular Engineering Research Proj	Semester 1, Semester 2	18.75
411-452 Biomolecular Engineering Design Project	Semester 2	18.75
411-453 Bioenvironmental Engineering	Semester 2	12.50

Core Participation Requirements:

For the purposes of considering request for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005), and Student Support and Engagement Policy, academic requirements for this subject are articulated in the Subject Overview, Learning Outcomes, Assessment and Generic Skills sections of this entry. It is University policy to take all reasonable steps to minimise the impact of disability upon academic study, and reasonable adjustments will be made to enhance a student's participation in the University's programs. Students who feel their disability may impact on meeting the requirements of this subject are encouraged to discuss this matter with a Faculty Student Adviser and Student Equity and Disability Support: http://services.unimelb.edu.au/disability