

Bachelor of Engineering and Bachelor of Pharmaceutical Science

Student ID		Student name	
Course code	3288	Year commenced course	
Course version	1 (for students who commenced in 2007 onwards)		
Credit points	240 credit points (40 x 6 credit points)		
Duration of degree	5 years full time, 10 years part time		
Time limit	10 years. Students have ten years in which to complete this award from the time they commence their course. Periods of intermission are counted as part of the ten years.		
Honours	Students are awarded a degree with honours for meritorious performance throughout the course. No additional time is required.		
Course adviser	http://www.eng.monash.edu.au/current-students/course-information.html#1		

Students should bring this course map with them when they seek course advice.

There are four course maps. Selection of the appropriate map is determined by the student's preparation in Chemistry, Physics and Specialist mathematics.

COURSE MAP 1

For students who have completed VCE Special Mathematics 3/4 but who have not completed VCE Physics 3/4 or the equivalent.

First year	Mark	Grade
<input type="checkbox"/> VPS1021 Organic chemistry I		
<input type="checkbox"/> VPS1022 Organic chemistry II		
<input type="checkbox"/> VPS1041 Mathematics for pharmaceutical scientists		
<input type="checkbox"/> VPS1042 Introduction to pharmaceutical sciences		
<input type="checkbox"/> VPS1071 Physical chemistry I		
<input type="checkbox"/> VPS1072 Physical chemistry II		
<input type="checkbox"/> VPS1081 Physiology I		
<input type="checkbox"/> VPS1082 Physiology II		
Second year	Mark	Grade
Core units		
<input type="checkbox"/> CHE2162 Materials and energy balances		
<input type="checkbox"/> CHE2163 Heat and mass transfer		
<input type="checkbox"/> CHE2164 Engineering thermodynamics I		
<input type="checkbox"/> CHM2735 Chemistry – principles and practice		
<input type="checkbox"/> ENG1010 Process systems analysis		
<input type="checkbox"/> ENG1080 Foundation physics		

<input type="checkbox"/> ENG1091 Mathematics for engineering		
<input type="checkbox"/> ENG2091 Advanced engineering mathematics A		
Third year	Mark	Grade
<input type="checkbox"/> VPS2011 Pharmaceutical biochemistry		
<input type="checkbox"/> VPS2021 Analytical methods		
<input type="checkbox"/> VPS2062 Pharmacology		
<input type="checkbox"/> VPS2071 Formulation chemistry I		
<input type="checkbox"/> VPS2072 Formulation chemistry II		
<input type="checkbox"/> VPS2092 Molecular cell biology		
<input type="checkbox"/> VPS2101 Product development I		
<input type="checkbox"/> VPS3081 Biopharmaceutics		
Fourth year	Mark	Grade
<input type="checkbox"/> CHE2161 Fluid mechanics		
<input type="checkbox"/> CHE3161 Chemistry and chemical thermodynamics		
<input type="checkbox"/> CHE3162 Process control		
<input type="checkbox"/> CHE3163 Sustainable processing I		
<input type="checkbox"/> CHE3164 Reaction engineering		
<input type="checkbox"/> CHE3165 Separation processes		
<input type="checkbox"/> CHE3166 Process design		
<input type="checkbox"/> CHE3171 Bioprocess technology		
Fifth year	Mark	Grade
<input type="checkbox"/> CHE4161 Engineering in society		
<input type="checkbox"/> CHE4162 Particle technology		
<input type="checkbox"/> CHE4163 Transport		
<input type="checkbox"/> CHE4170 Design project (12 points)		
<input type="checkbox"/> CHE4171 Biochemical engineering		
<input type="checkbox"/> CHE4180 Chemical engineering (12 points)		
Professional requirements		
Students may not graduate until they have completed their work experience and submitted a satisfactory report on the experience		
<input type="checkbox"/> 12 weeks approved engineering work experience		
<input type="checkbox"/> Report submitted to department and approved		

COURSE MAP 2

For students who have completed VCE Physics 3/4 but who have not completed VCE Specialist Mathematics 3/4 or the equivalent

First year	Mark	Grade
<input type="checkbox"/> VPS1021 Organic chemistry I		
<input type="checkbox"/> VPS1022 Organic chemistry II		
<input type="checkbox"/> VPS1041 Mathematics for pharmaceutical scientists		
<input type="checkbox"/> VPS1042 Introduction to pharmaceutical sciences		
<input type="checkbox"/> VPS1071 Physical chemistry I		
<input type="checkbox"/> VPS1072 Physical chemistry II		
<input type="checkbox"/> VPS1081 Physiology I		
<input type="checkbox"/> VPS1082 Physiology II		
Second year	Mark	Grade
<input type="checkbox"/> CHE2161 Fluid mechanics		
<input type="checkbox"/> CHE2162 Materials and energy balances		
<input type="checkbox"/> CHE2163 Heat and mass transfer		
<input type="checkbox"/> CHE2164 Engineering thermodynamics I		
<input type="checkbox"/> CHM2735 Chemistry – principles and practice		
<input type="checkbox"/> ENG1010 Process systems analysis		
<input type="checkbox"/> ENG1090 Foundation mathematics		
<input type="checkbox"/> ENG1091 Mathematics for engineering		
Third year	Mark	Grade
<input type="checkbox"/> VPS2011 Pharmaceutical biochemistry		
<input type="checkbox"/> VPS2021 Analytical methods		
<input type="checkbox"/> VPS2062 Pharmacology		
<input type="checkbox"/> VPS2071 Formulation chemistry I		
<input type="checkbox"/> VPS2072 Formulation chemistry II		
<input type="checkbox"/> VPS2092 Molecular cell biology		
<input type="checkbox"/> VPS2101 Product development I		
<input type="checkbox"/> VPS3081 Biopharmaceutics		
Fourth year	Mark	Grade
<input type="checkbox"/> CHE3161 Chemistry and chemical thermodynamics		
<input type="checkbox"/> CHE3162 Process control		
<input type="checkbox"/> CHE3163 Sustainable processing I		
<input type="checkbox"/> CHE3164 Reaction engineering		
<input type="checkbox"/> CHE3165 Separation processes		
<input type="checkbox"/> CHE3166 Process design		
<input type="checkbox"/> CHE3171 Bioprocess technology		

<input type="checkbox"/> ENG2091 Advanced engineering mathematics A		
Fifth year	Mark	Grade
<input type="checkbox"/> CHE4161 Engineering in society		
<input type="checkbox"/> CHE4162 Particle technology		
<input type="checkbox"/> CHE4163 Transport		
<input type="checkbox"/> CHE4170 Design project (12 points)		
<input type="checkbox"/> CHE4171 Biochemical engineering		
<input type="checkbox"/> CHE4180 Chemical engineering project (12 points)		
Professional requirements		
Students may not graduate until they have completed their work experience and submitted a satisfactory report on the experience		
<input type="checkbox"/> 12 weeks approved engineering work experience		
<input type="checkbox"/> Report submitted to department and approved		

COURSE MAP 3

For students who have not completed VCE Special Mathematics 3/4 and VCE Physics 3/4 or the equivalent

First year	Mark	Grade
<input type="checkbox"/> VPS1021 Organic chemistry I		
<input type="checkbox"/> VPS1022 Organic chemistry I		
<input type="checkbox"/> VPS1071 Physical chemistry I		
<input type="checkbox"/> VPS1072 Physical chemistry II		
<input type="checkbox"/> VPS1081 Physiology I		
<input type="checkbox"/> VPS1082 Physiology II		
<input type="checkbox"/> VPS1041 Mathematics for pharmaceutical scientists		
<input type="checkbox"/> VPS1042 Introduction to pharmaceutical sciences		
Second year	Mark	Grade
<input type="checkbox"/> CHE2162 Materials and energy balances		
<input type="checkbox"/> CHE2163 Heat and mass transfer		
<input type="checkbox"/> CHE2164 Engineering thermodynamics I		
<input type="checkbox"/> CHM2735 Chemistry – principles and practice		
<input type="checkbox"/> ENG1010 Process systems analysis		
<input type="checkbox"/> ENG1080 Foundation physics		
<input type="checkbox"/> ENG1090 Foundation mathematics		
<input type="checkbox"/> ENG1091 Mathematics for engineering		
Third year	Mark	Grade
<input type="checkbox"/> VPS2011 Pharmaceutical biochemistry		
<input type="checkbox"/> VPS2021 Analytical methods		
<input type="checkbox"/> VPS2062 Pharmacology		
<input type="checkbox"/> VPS2071 Formulation chemistry IIA		
<input type="checkbox"/> VPS2072 Formulation chemistry II		
<input type="checkbox"/> VPS2092 Molecular cell biology		
<input type="checkbox"/> VPS2101 Product development I		
<input type="checkbox"/> VPS3081 Biopharmaceutics		
Fourth year	Mark	Grade
<input type="checkbox"/> CHE2161 Fluid mechanics		
<input type="checkbox"/> CHE3161 Chemistry and chemical thermodynamics		
<input type="checkbox"/> CHE3162 Process control		
<input type="checkbox"/> CHE3163 Sustainable processing I		
<input type="checkbox"/> CHE3164 Reaction engineering		
<input type="checkbox"/> CHE3165 Separation processes		
<input type="checkbox"/> CHE3166 Process design		
<input type="checkbox"/> ENG2091 Advanced engineering mathematics A		

Fifth year	Mark	Grade
<input type="checkbox"/> CHE3171 Bioprocess technology		
<input type="checkbox"/> CHE4161 Engineering in society		
<input type="checkbox"/> CHE4162 Particle technology		
<input type="checkbox"/> CHE4170 Design project (12 points)		
<input type="checkbox"/> CHE4171 Biochemical engineering		
<input type="checkbox"/> CHE4180 Chemical engineering project (12 points)		
Professional requirements		
Students may not graduate until they have completed their work experience and submitted a satisfactory report on the experience		
<input type="checkbox"/> 12 weeks approved engineering work experience		
<input type="checkbox"/> Report submitted to department and approved		

COURSE MAP 4

For students who have completed both VCE Special Mathematics 3/4 and VCE Physics 3/4 or the equivalent

First year	Mark	Grade
<input type="checkbox"/> VPS1021 Organic chemistry I		
<input type="checkbox"/> VPS1022 Organic chemistry II		
<input type="checkbox"/> VPS1041 Mathematics for pharmaceutical scientists		
<input type="checkbox"/> VPS1042 Introduction to pharmaceutical sciences		
<input type="checkbox"/> VPS1071 Physical chemistry I		
<input type="checkbox"/> VPS1072 Physical chemistry II		
<input type="checkbox"/> VPS1081 Physiology I		
<input type="checkbox"/> VPS1082 Physiology II		
Second year	Mark	Grade
<input type="checkbox"/> CHE2162 Material and energy balances		
<input type="checkbox"/> CHE2163 Heat and mass transfer		
<input type="checkbox"/> CHE2164 Engineering thermodynamics I		
<input type="checkbox"/> CHM2735 Chemistry – principles and practice		
<input type="checkbox"/> ENG1010 Process systems analysis		
<input type="checkbox"/> ENG1060 Engineering computing		
<input type="checkbox"/> ENG1091 Mathematics for engineering		
<input type="checkbox"/> ENG2091 Advanced engineering mathematics A		
Third year	Mark	Grade
<input type="checkbox"/> VPS2011 Pharmaceutical biochemistry		
<input type="checkbox"/> VPS2021 Analytical methods		
<input type="checkbox"/> VPS2062 Pharmacology		
<input type="checkbox"/> VPS2071 Formulation chemistry I		
<input type="checkbox"/> VPS2072 Formulation chemistry II		
<input type="checkbox"/> VPS2092 Molecular cell biology		
<input type="checkbox"/> VPS2101 Product development I		
<input type="checkbox"/> VPS3081 Biopharmaceutics		
Fourth year	Mark	Grade
<input type="checkbox"/> CHE2161 Fluid mechanics		
<input type="checkbox"/> CHE3161 Chemistry and chemical thermodynamics		
<input type="checkbox"/> CHE3162 Process control		
<input type="checkbox"/> CHE3163 Sustainable processing I		
<input type="checkbox"/> CHE3164 Reaction engineering		
<input type="checkbox"/> CHE3165 Separation processes		
<input type="checkbox"/> CHE3166 Process design		
<input type="checkbox"/> CHE3171 Bioprocess technology		

Fifth year	Mark	Grade
<input type="checkbox"/> CHE4161 Engineering in society		
<input type="checkbox"/> CHE4162 Particle technology		
<input type="checkbox"/> CHE4163 Transport		
<input type="checkbox"/> CHE4170 Design project (12 points)		
<input type="checkbox"/> CHE4171 Biochemical engineering		
<input type="checkbox"/> CHE4180 Chemical engineering (12 points)		
Professional requirements		
Students may not graduate until they have completed their work experience and submitted a satisfactory report on the experience		
<input type="checkbox"/> 12 weeks approved engineering work experience		
<input type="checkbox"/> Report submitted to department and approved		

Every effort has been made to ensure that the information provided is correct at the time of publication.
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