

BACHELOR OF SOFTWARE ENGINEERING (2770) - 2013
Industry Based Learning (IBL) placement

Student Name: _____ ID: _____

This course map shows a recommended progression only. Some units can be taken in semesters other than those indicated below. Students completing units in a different sequence to that indicated below should be aware of unit prerequisites and semesters of offering prior to varying their course progression. Please see a Course Advisor for any queries.

Year 1

First Semester	FIT1040 Programming fundamentals	Approved Elective	MAT1830 Discrete mathematics for computer science	FIT1029 Algorithmic problem solving
Second Semester	FIT1004 Data management	FIT1010 Introduction to software engineering [FIT1040 or FIT1002]	FIT1031 Computers and networks	FIT1008 Computer science [[FIT1040 or FIT1002] & FIT1029]

Year 2

First Semester	FIT2001 Systems development [Co-req: FIT1004]	FIT2024 Software engineering practice [FIT1008 or FIT2034]	FIT2069 Computer architecture [[FIT1031 or FIT1001] & FIT1008]	FIT2004 Algorithms and data structures [FIT1008 & 6 pts approved Maths]
Second Semester	FIT3013 Formal specification for software engineering [FIT2004 & (MAT1830 or MTH1112)]	FIT2043 Technical documentation for software engineers [FIT1010 or FIT1002]	FIT2070 Operating systems [[FIT1031 or FIT1001] & FIT1008]	MAT2003 Continuous mathematics for computer science

Year 3

Summer Semester	FIT2002 Project management [24pts level 1]			
First Semester	FIT3042 Systems tools and programming languages [FIT1008]	FIT3077 Software engineering: architecture and design [FIT2001 & (FIT2024 or FIT2004)]	FIT3141 Data communications and computer networks [FIT2069 & FIT2070] or ECE2041 Telecommunications	FIT2003 IT professional practice [24pts level 1 FIT] or ENG1061 * Engineering profession
Second Semester	FIT3045 Industry-based learning (18 points)			

Year 4 (Option 1)

First Semester	FIT4002 Software engineering studio project (Full year project)	FIT4004 System verification and validation, quality and standards [FIT2004 & FIT2024 & FIT3077 & MAT1830]	Approved Elective	Approved Elective
Second Semester	[Pre-req: FIT3077 & FIT2002 Co-req: FIT4004] (12 points)	FIT3142 Distributed computing [FIT3141 or ECE2041]	Approved Elective	Approved Elective

Year 4 (Option 2) **

First Semester	FIT4002 Software engineering studio project (Full year project)	FIT4004 System verification and validation, quality and standards [FIT2004 & FIT2024 & FIT3077 & MAT1830]	FIT4005 Research methods	FIT4441 Honours thesis- part 1 (Full year project)
Second Semester	[Pre-req: FIT3077 & FIT2002 Co-req: FIT4004] (12 points)	FIT3142 Distributed computing [FIT3141 or ECE2041]	FIT4442/4448 Honours thesis – part 2/final (Full year project – 18 points total)	

192 points must be completed to qualify for the degree of Bachelor of Software Engineering, with the following conditions:

- normally 48 points, and a maximum of 60 points, of first year level units will be counted;
- a maximum of 60 points can be completed at second year level
- at least 36 points must be completed at third year level

All units are 6 points unless indicated otherwise.

* Students have the option of completing FIT2003 IT professional practice (recommended) OR ENG1061 Engineering profession.

** Level 4, Option 2 is only available to students undertaking the honours version of the degree. Entry to the Honours stream is by application, based upon a weighted average of previous years' results.

Approved course variations to the BSE course structure:

- Students requiring other mathematics for an Engineering sequence may replace MAT1830/2003 with approval.
- Students intending to complete a minor or major sequence in Mathematics within the Faculty of Science should substitute another mathematics unit for MAT2003, with approval.

Any other course variations must be approved by the Course Director and will be confirmed in writing.

Software and programming

Systems

Foundation

Software Engineering

Approved Electives. Please see <http://www.infotech.monash.edu.au/current/course-information/> for approved elective lists. A limited number of units not on the approved elective list may be taken with approval.