

BACHELOR OF SOFTWARE ENGINEERING (2770): 2011 - 2012
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.

UNITS IN RED ARE REPLACEMENTS FOR CORE UNITS NO LONGER OFFERED. SEE
<http://www.infotech.monash.edu.au/current/course-information/> **FOR FURTHER TRANSITION INFORMATION.**
Year 1

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|------------------------|--|--|---|--|
| First Semester | FIT1002 Computer programming OR 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 [FIT1002 or FIT1040] | FIT1031 Computers and networks | FIT1008 Computer science [(FIT1002 or FIT1040) & FIT1029] |

Year 2

| | | | | |
|------------------------|---|--|---|---|
| First Semester | FIT2001 Systems development [Co-req: FIT1004 or FIT2010] | FIT2024 Software engineering practice [FIT1008 or FIT2034] | FIT2069 Computer architecture [(FIT1031 or FIT1001) & FIT1008] | FIT2004 Algorithms and data structures [FIT1008 & 6 pts Level 1 Maths] |
| Second Semester | FIT3013 Formal specification for software engineering [FIT2004 & (MAT1830 or MTH1112)] | FIT2043 Technical documentation for software engineers [FIT1002 or FIT1010] | FIT2070 Operating systems [(FIT1031 or FIT1001) & FIT1008] | MAT2003 Continuous mathematics for computer science |

Year 3

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|------------------------|--|---|--|---|
| 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)

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|------------------------|--|--|--------------------------|--------------------------|
| 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) **

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|------------------------|--|--|---|---|
| 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 120 points can be completed at first and 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.

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| 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. |