



**BACHELOR OF SOFTWARE ENGINEERING (2770) – 2010 Transition  
Industry Based Learning (IBL) Placement**

This course map shows a recommended progression only. Some units can be taken in semesters other than those indicated above. Students completing units in a different sequence to that indicated above 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://intranet.monash.edu.au/infotech/current/course-information/> FOR FURTHER TRANSITION INFORMATION.**

**Level 1**

<b>First Semester</b>	<b>FIT1001</b> Computer systems <b>OR</b> <b>FIT1031</b> Computers and networks	<b>FIT1002</b> Computer programming <b>OR</b> <b>FIT1040</b> Programming fundamentals	<b>MAT1841</b> Mathematics for computer science 1 <b>OR</b> <b>MAT2003</b> Continuous mathematics for computer science	<b>FIT1029</b> Algorithmic problem solving
<b>Second Semester</b>	<b>FIT1010</b> Introduction to software engineering	<b>FIT1008</b> Computer science	<b>MAT1830</b> Mathematics for computer science 2	<b>ENG1061</b> Engineering profession

**Level 2**

<b>First Semester</b>	<b>FIT2001</b> Systems analysis and design	<b>FIT2010</b> Database <b>OR</b> <b>FIT1004</b> Data management	<b>FIT2004</b> Algorithms and data structures	<b>FIT2043</b> Technical documentation for software engineers
<b>Second Semester</b>	<b>FIT2024</b> Software engineering practice	<b>FIT2008</b> Networks and data communications <b>OR</b> <b>FIT1005</b> Networks and data communications (Caulfield)	<b>FIT2014</b> Theory of computation	<b>FIT2022</b> Computer systems 2 <b>OR</b> <b>FIT2070</b> Operating systems

**Level 3**

<b>Summer Semester</b>	<b>FIT3086</b> Project management <b>OR</b> <b>FIT2002</b> Project management			
<b>First Semester</b>	<b>FIT3077</b> Software engineering: architecture and design	<b>FIT3042</b> Systems tools and programming languages	<b>FIT3013</b> Formal specification for software engineering	<b>FIT3084</b> Multimedia programming and the WWW <b>OR</b> <b>FIT2013/FIT3083</b> e-Business software technologies
<b>Second Semester</b>	<b>FIT3045</b> Industry based learning (18 points)			

#### Level 4 (Option 1)

<b>First Semester</b>	<b>FIT4002</b> Software engineering studio project  (Full year project)  [FIT3077 and FIT2002 OR FIT3086]	<b>FIT4004</b> System verification and validation, quality and standards  [FIT2004 & FIT2024 & FIT3042 & FIT3077 & FIT3086]	<b>Approved Elective</b>  [See below website for list of approved electives]	<b>Approved Elective</b>  [See below website for list of approved electives]
<b>Second Semester</b>	(12 points)	<b>FIT4001</b> Parallel and distributed systems [FIT2022] <b>OR</b> <b>FIT3142 *</b> Distributed computing <b>OR</b> <b>FIT3143 *</b> Parallel computing	<b>Approved Elective</b>  [See below website for list of approved electives]	<b>Approved Elective</b>  [See below website for list of approved electives]

#### Level 4 (Option 2) NOT AVAILABLE IN 2011

<b>First Semester</b>	<b>FIT4002</b> Software engineering studio project  (Full year project) (12 points)	<b>FIT4003 **</b> Software engineering research project  (Full year project) (12 points)	<b>FIT4004</b> System verification and validation, quality and standards [FIT2004 & FIT2024 & FIT3042 & FIT3077 & FIT3086]	<b>Approved Elective</b>  [See below website for list of approved electives]
<b>Second Semester</b>	[FIT3077 and FIT2002 OR FIT3086]		<b>FIT4001</b> Parallel and distributed systems [FIT2022]	<b>Approved Elective</b>  [See below website for list of approved electives]

#### Level 4 (Option 3) REFER TO 2011 COURSEMAP FOR HONOURS STREAM

<b>First Semester</b>	<b>FIT4013 **</b> Software engineering research project  (Full year project) (24 points)	<b>FIT4004</b> System verification and validation, quality and standards [FIT2004 & FIT2024 & FIT3042 & FIT3077 & FIT3086]	<b>FIT4002</b> Software engineering studio project  (Full year project) (12 points)
<b>Second Semester</b>		<b>FIT4001</b> Parallel and distributed systems [FIT2022]	[FIT3077 and FIT2002 OR FIT3086]

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

# IBL Students who do not complete FIT3086 over summer, must take one elective as an overload during 3<sup>rd</sup> or 4<sup>th</sup> year.

\*\* FIT4003 and FIT4013 are honours research projects, available only to students undertaking the honours version of the degree. Entry to these units is by invitation, based upon a weighted average of previous years' results.

All units are 6 points unless indicated otherwise.

#### Approved course variations to the BSE course structure:

- Students requiring other mathematics for an Engineering sequence may replace MAT1830/1841 with approval.
- Students intending to complete a minor or major sequence in sequence in Mathematics within the Faculty of Science should substitute another mathematics unit for MAT1830, with approval.

**\*Students WITHOUT a credit average in FIT2008 and FIT2022 should complete FIT3143 in place of FIT4001.**

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

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

**Students should check the current University Handbook for unit prerequisites.**