Information Technology

Bachelor of Software Engineering

Industry Based Learning Stream Course Map - 2013

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	**FIT1031** Computers and networks	**FIT1008** Introduction to computer science

Year 2

First Semester	**FIT2001** Systems development	**FIT2043** Technical documentation for software engineering	**FIT2069** Computer architecture	**FIT2004** Algorithms and data structures
Second Semester	**FIT3013** Formal specification for software engineering	**FIT2024** Software engineering practice	**FIT2070** Operating systems	**MAT2003** Continuous mathematics for computer science

Year 3

Summer Semester	**FIT2002** Project management			
First Semester	**FIT3042** Systems tools and programming languages	**FIT3077** Software engineering: architecture and design	**FIT3141** Data communications and computer networks	**FIT2003** IT professional practice
Second Semester	**FIT3045** Industry based learning (18 points)			

Year 4 (Option 1)

First Semester	**FIT4002** Software engineering studio project (12 points)	**FIT4004** System verification and validation, quality and standards	**Approved Elective**	**Approved Elective**
Second Semester		**FIT3142** Distributed computing	**Approved Elective**	**Approved Elective**

Year 4 (Option 2 – Honours Research)

First Semester	**FIT4002** Software engineering studio project (12 points)	**FIT4004** System verification and validation, quality and standards	**FIT4005** Research methods	**FIT4441** Honours thesis – part 1 (Full-year project)
Second Semester		**FIT3142** Distributed computing	**FIT4442/4448** Honours thesis – part 2/final (Full-year project)	

Common Core (units common to all IT undergraduate degrees)