

Program Guide

Bachelor of Information Technology

1. Program Details

Title	Bachelor of Information Technology
Abbreviation	BInfoTech
RMIT Program Code	BP162
Credit Points	288
Career	Undergraduate
Duration/length	3 Years full-time
Campuses	City
Location	Onshore – City Offshore – AVU, RMIT Vietnam
Owning School	140H – School of Computer Science and Information Technology http://www.rmit.edu.au/csit
Partnered offering / corporate client	Not applicable
ASCED code:	029900
CRICOS code:	039549G
Proposed Introduction	Semester 1, 2008
Contact Details	Santha Sumanasekara santha.sumanasekara@rmit.edu.au 9925 9673

2. Plan Details

Plan 1

RMIT Plan Code	BP162APP8
Title	Bachelor of Information Technology (Application Programming)
Award Title	Bachelor of Information Technology (Application Programming)
ASCED code:	029900
CRICOS code:	To be advised

Plan 2

RMIT Plan Code	BP162BA8
Title	Bachelor of Information Technology (Business Applications)
Award Title	Bachelor of Information Technology (Business Applications)
ASCED code:	029900
CRICOS code:	To be advised

Plan 3

RMIT Plan Code	BP162MUL8
Title	Bachelor of Information Technology (Multimedia Design)
Award Title	Bachelor of Information Technology (Multimedia Design)
ASCED code:	029900
CRICOS code:	To be advised

Plan 4

RMIT Plan Code	BP162NET8
Title	Bachelor of Information Technology (Network Programming)
Award Title	Bachelor of Information Technology (Network Programming)
ASCED code:	029900
CRICOS code:	To be advised

Plan 5

RMIT Plan Code	BP162SYS8
Title	Bachelor of Information Technology (System Administration)
Award Title	Bachelor of Information Technology (System Administration)
ASCED code:	029900
CRICOS code:	To be advised

Plan 6

RMIT Plan Code	BP162WEB8
Title	Bachelor of Information Technology (Web Systems)
Award Title	Bachelor of Information Technology (Web Systems)
ASCED code:	029900
CRICOS code:	To be advised

3. Program Map

Year One (Common program for all the plans)

Year	Semester	BP162P7 Bachelor of Information Technology -- (common first year)			
1	Sem 1	Introduction to Programming	Introduction to Information Technology	Computer Organisation	Mathematics for Computing
	Sem. 2	Programming 1	Web Programming	Database Concepts	Software Engineering Fundamentals

Total Credit Points = 96

Complete Eight (8) Courses from:			
Subject Area	Catalogue Number	Course Title	Credit Points
COSC	1519	Introduction to Programming	12
COSC	1078	Introduction to Information Technology	12
COSC	1082	Computer Organisation	12
MATH	1074	Mathematics for Computing	12
COSC	1073	Programming 1	12
COSC	2413	Web Programming	12
ISYS	1057	Database Concepts	12
ISYS	1118	Software Engineering Fundamentals	12

Plan 1 – Application Programming: BP162APP8

Year	Semester	BP162APP8 – Bachelor of Information Technology (Application Programming)			
2	Sem 1	Data Communication and Net-centric Computing	Programming 2	Major Study Course 1	Second Major/ Minor/ IT Elective 1
	Sem 2	Professional Computing Practice	Software Architecture: Design & Implement	Major Study Course 2	Second Major/ Minor/ IT Elective 2
3	Sem 1	Student Elective	CS Elective	Major Study Course 3	Second Major/ Minor/ IT Elective 3
	Sem 2	Student Elective	CS Elective	Major Study Course 4	Second Major/ Minor/ IT Elective 4

Year Two

Total Credit Points = 96

Complete Four (4) Courses from:			
Subject Area	Catalogue Number	Course Title	Credit Points
COSC	1111	Data Communication and Net-centric Computing	12
COSC	1076	Programming 2	12
COSC	2391	Software Architecture: Design and Implementation	12
COSC	1147	Professional Computing Practice	12

AND

Complete Two (2) Courses from:			
Subject Area	Catalogue Number	Course Title	Credit Points
COSC	2269	AI Concepts and Applications	12
COSC	2353	E-Commerce and Enterprise Systems	12
COSC	1254	Object Oriented Programming	12
COSC	1284	Programming Techniques	12
COSC	1093	Scripting Language Programming	12
COSC	1221	User Interface Programming	12
ISYS	1126	Web Database Applications	12
COSC	2276	Web Development Technologies	12

AND

Complete Two (2) Courses from one of the minor streams (Tables in Pages 19 – 22)			
Subject Area	Catalogue Number	Course Title	Credit Points
		Minor Course 1	12
		Minor Course 2	12

Year Three

Total Credit Points = 96

Complete Two (2) Courses (Information Technology Electives) from:			
Subject Area	Catalogue Number	Name	Credit Points
ISYS	2403	Advanced Distributed Systems	12
COSC	1204	Agent-oriented Programming and Design	12
COSC	2123	Algorithms and Analysis	12
COSC	2269	AI Concepts and Applications	12
COSC	1127	Artificial Intelligence	12
COSC	1235	Broadcast Network Applications	12
COSC	1107	Computing Theory	12
COSC	2404	Database Administration	12
COSC	2406	Database Systems	12
COSC	2271	Digital Media Computing	12
COSC	2104	Document Markup Languages	12
COSC	2353	E-Commerce and Enterprise Systems	12
COSC	1207	Evolutionary Computing	12
COSC	1187	Interactive 3D Graphics and Animation	12
COSC	1197	Distributed Systems	12

INTE	2425	Introduction to Network Security	12
ISYS	1073	Knowledge and Data Warehousing	12
COSC	1208	Mathematical Logic and Logic Programming	12
COSC	2309	Mobile Application Development	12
COSC	1179	Network Programming	12
COSC	1254	Object Oriented Programming	12
COSC	1114	Operating Systems Principles	12
COSC	1284	Programming Techniques	12
COSC	2391	Software Architecture: Design & Implementation	12
COSC	1226	Real-time Rendering and 3D Games	12
COSC	1093	Scripting Language Programming	12
INTE	1071	Secure E-Commerce	12
INTE	2402	Secure Programming Environments	12
COSC	2299	Software Engineering: Process and Tools	12
COSC	1133	Unix Systems Administration	12
COSC	1221	User Interface Programming	12
ISYS	1126	Web Database Applications	12
COSC	2276	Web Development Technologies	12
COSC	1301	Web Servers and Web technology	12
COSC	2424	Windows System Administration	12

AND

Complete Two (2) Courses from:			
Subject Area	Catalogue Number	Course Title	Credit Points
COSC	2269	AI Concepts and Applications	12
COSC	2353	E-Commerce and Enterprise Systems	12
COSC	1254	Object Oriented Programming	12
COSC	1284	Programming Techniques	12
COSC	1093	Scripting Language Programming	12
COSC	1221	User Interface Programming	12
ISYS	1126	Web Database Applications	12
COSC	2276	Web Development Technologies	12

AND

Complete Two (2) Courses from one of the minor streams (Tables in Pages 19 – 22)			
Subject Area	Catalogue Number	Course Title	Credit Points
		Minor Course 1	12
		Minor Course 2	12

AND

Complete two (2) Courses from:			
Subject Area	Catalogue Number	Course Title	Credit Points
		Student Elective	12
		Student Elective	12

Plan 2 – Business Applications Major: BP162BA8

Year	Semester	BP162BA8 – Bachelor of Information Technology (Business Applications)			
2	Sem 1	Data Communication and Net-centric Computing	Programming 2	Professional Practice for Information Systems	Second Major/ Minor/ IT Elective 1
	Sem 2	Professional Computing Practice	Software Architecture: Design & Implement	Major Study Course 2	Second Major/ Minor/ IT Elective 2
3	Sem 1	Student Elective	CS Elective	Major Study Course 3	Second Major/ Minor/ IT Elective 3
	Sem 2	Student Elective	CS Elective	Major Study Course 4	Second Major/ Minor/ IT Elective 4

Year Two

Total Credit Points = 96

Complete Five (5) Courses from:			
Subject Area	Catalogue Number	Course Title	Credit Points
COSC	1111	Data Communication and Net-centric Computing	12
COSC	1076	Programming 2	12
COSC	2391	Software Architecture: Design and Implementation	12
COSC	1147	Professional Computing Practice	12
ISYS	2051	Professional Practice for Information Systems	12

AND

Complete One (1) Course from:			
Subject Area	Catalogue Number	Course Title	Credit Points
INTE	2047	E-Commerce Technology I	12
ISYS	1047	Decision Support Systems	12
ISYS	1051	Business Analysis	12
INTE	1063	Computer Security and Computer Systems Audit	12

ISYS	2067	Business Solutions Using Spreadsheet Models	12
ISYS	2068	Computerised Accounting Systems	12
ISYS	1049	Usability Analysis	12

AND

Complete Two (2) Courses from one of the minor streams (Tables in Pages 19 – 22)			
Subject Area	Catalogue Number	Course Title	Credit Points
		Minor Course 1	12
		Minor Course 2	12

Year Three

Total Credit Points = 96

Complete Two (2) Courses (Information Technology Electives) from:			
Subject Area	Catalogue Number	Name	Credit Points
ISYS	2403	Advanced Distributed Systems	12
COSC	1204	Agent-oriented Programming and Design	12
COSC	2123	Algorithms and Analysis	12
COSC	2269	AI Concepts and Applications	12
COSC	1127	Artificial Intelligence	12
COSC	1235	Broadcast Network Applications	12
COSC	1107	Computing Theory	12
COSC	2404	Database Administration	12
COSC	2406	Database Systems	12
COSC	2271	Digital Media Computing	12
COSC	2104	Document Markup Languages	12
COSC	2353	E-Commerce and Enterprise Systems	12
COSC	1207	Evolutionary Computing	12
COSC	1187	Interactive 3D Graphics and Animation	12
COSC	1197	Distributed Systems	12
INTE	2425	Introduction to Network Security	12
ISYS	1073	Knowledge and Data Warehousing	12
COSC	1208	Mathematical Logic and Logic Programming	12
COSC	2309	Mobile Application Development	12
COSC	1179	Network Programming	12
COSC	1254	Object Oriented Programming	12
COSC	1114	Operating Systems Principles	12

COSC	1284	Programming Techniques	12
COSC	2391	Software Architecture: Design & Implementation	12
COSC	1226	Real-time Rendering and 3D Games	12
COSC	1093	Scripting Language Programming	12
INTE	1071	Secure E-Commerce	12
INTE	2402	Secure Programming Environments	12
COSC	2299	Software Engineering: Process and Tools	12
COSC	1133	Unix Systems Administration	12
COSC	1221	User Interface Programming	12
ISYS	1126	Web Database Applications	12
COSC	2276	Web Development Technologies	12
COSC	1301	Web Servers and Web technology	12
COSC	2424	Windows System Administration	12

AND

Complete two (2) Courses from:			
Subject Area	Catalogue Number	Course Title	Credit Points
INTE	2047	E-Commerce Technology I	12
ISYS	1047	Decision Support Systems	12
ISYS	1051	Business Analysis	12
INTE	1063	Computer Security and Computer Systems Audit	12
ISYS	2067	Business Solutions Using Spreadsheet Models	12
ISYS	2068	Computerised Accounting Systems	12
ISYS	1049	Usability Analysis	12

AND

Complete Two (2) Courses from one of the minor streams (Tables in Pages 19 – 22)			
Subject Area	Catalogue Number	Course Title	Credit Points
		Minor Course 1	12
		Minor Course 2	12

AND

Complete two (2) Courses from:			
Subject Area	Catalogue Number	Course Title	Credit Points
		Student Elective	12
		Student Elective	12

Plan 3 – Multimedia Design Major: BP162MUL8

Year	Semester	BP162MULTI – Bachelor of Information Technology (Multimedia Design)			
2	Sem 1	Data Communication and Net-centric Computing	Programming 2	Design for Interactive Media 1	Second Major/ Minor/ IT Elective 1
	Sem 2	Professional Computing Practice	Software Architecture: Design & Implement	Design for Interactive Media 2	Second Major/ Minor/ IT Elective 2
3	Sem 1	Student Elective	CS Elective	Major Study Course 3	Second Major/ Minor/ IT Elective 3
	Sem 2	Student Elective	CS Elective	Major Study Course 4	Second Major/ Minor/ IT Elective 4

Year Two

Total Credit Points = 96

Complete Six (6) Courses from:			
Subject Area	Catalogue Number	Course Title	Credit Points
COSC	1111	Data Communication and Net-centric Computing	12
COSC	1076	Programming 2	12
COSC	2391	Software Architecture: Design and Implementation	12
COSC	1147	Professional Computing Practice	12
COSC	1009	Design for Interactive Media 1	12
COSC	1010	Design for Interactive Media 2	12

AND

Complete Two (2) Courses from one of the minor streams (Tables in Pages 19 – 22)			
Subject Area	Catalogue Number	Course Title	Credit Points
		Minor Course 1	12
		Minor Course 2	12

Year Three

Total Credit Points = 96

Complete Two (2) Courses (Information Technology Electives) from:			
Subject Area	Catalogue Number	Name	Credit Points
ISYS	2403	Advanced Distributed Systems	12
COSC	1204	Agent-oriented Programming and Design	12
COSC	2123	Algorithms and Analysis	12
COSC	2269	AI Concepts and Applications	12
COSC	1127	Artificial Intelligence	12
COSC	1235	Broadcast Network Applications	12
COSC	1107	Computing Theory	12
COSC	2404	Database Administration	12

COSC	2406	Database Systems	12
COSC	2271	Digital Media Computing	12
COSC	2104	Document Markup Languages	12
COSC	2353	E-Commerce and Enterprise Systems	12
COSC	1207	Evolutionary Computing	12
COSC	1187	Interactive 3D Graphics and Animation	12
COSC	1197	Distributed Systems	12
INTE	2425	Introduction to Network Security	12
ISYS	1073	Knowledge and Data Warehousing	12
COSC	1208	Mathematical Logic and Logic Programming	12
COSC	2309	Mobile Application Development	12
COSC	1179	Network Programming	12
COSC	1254	Object Oriented Programming	12
COSC	1114	Operating Systems Principles	12
COSC	1284	Programming Techniques	12
COSC	2391	Software Architecture: Design & Implementation	12
COSC	1226	Real-time Rendering and 3D Games	12
COSC	1093	Scripting Language Programming	12
INTE	1071	Secure E-Commerce	12
INTE	2402	Secure Programming Environments	12
COSC	2299	Software Engineering: Process and Tools	12
COSC	1133	Unix Systems Administration	12
COSC	1221	User Interface Programming	12
ISYS	1126	Web Database Applications	12
COSC	2276	Web Development Technologies	12
COSC	1301	Web Servers and Web technology	12
COSC	2424	Windows System Administration	12

AND

Complete Two (2) Courses from:			
Subject Area	Catalogue Number	Course Title	Credit Points
COMM	1000	Narrative for Multimedia	12
COSC	2192	Time Based Media	12
GRAP	2169	Imaging and Animation	12
COSC	2182	Advanced 3D Imaging and Animation	12
COSC	2191	Advanced Multimedia Authoring	12

INTE	1113	Web 3D Technologies	12
COSC	1221	User Interface Programming	12
COSC	1215	Web Media Technologies	12

AND

Complete Two (2) Courses from one of the minor streams (Tables in Pages 19 – 22)			
Subject Area	Catalogue Number	Course Title	Credit Points
		Minor Course 1	12
		Minor Course 2	12

AND

Complete two (2) Courses from:			
Subject Area	Catalogue Number	Course Title	Credit Points
		Student Elective	12
		Student Elective	12

Plan 4 – Network Programming Major: BP162NET8

Year	Semester	BP162NET8 – Bachelor of Information Technology (Network Programming)			
2	Sem 1	Data Communication and Net-centric Computing	Programming 2	Distributed Systems	Second Major/ Minor/ IT Elective 1
	Sem 2	Professional Computing Practice	Software Architecture: Design & Implement	Major Study Course 2	Second Major/ Minor/ IT Elective 2
3	Sem 1	Student Elective	CS Elective	Major Study Course 3	Second Major/ Minor/ IT Elective 3
	Sem 2	Student Elective	CS Elective	Major Study Course 4	Second Major/ Minor/ IT Elective 4

Year Two

Total Credit Points = 96

Complete Five (5) Courses from:			
Subject Area	Catalogue Number	Course Title	Credit Points
COSC	1111	Data Communication and Net-centric Computing	12
COSC	1076	Programming 2	12
COSC	2391	Software Architecture: Design and Implementation	12
COSC	1147	Professional Computing Practice	12
COSC	1197	Distributed Systems	12

AND

Complete One (1) Course from:			
Subject Area	Catalogue Number	Course Title	Credit Points
COSC	1235	Broadcast Network Applications	12
INTE	2425	Introduction to Network Security	12
COSC	1179	Network Programming	12
COSC	2309	Mobile Application Development	12

AND

Complete Two (2) Courses from one of the minor streams (Tables in Pages 19 – 22)			
Subject Area	Catalogue Number	Course Title	Credit Points
		Minor Course 1	12
		Minor Course 2	12

Year Three

Total Credit Points = 96

Complete Two (2) Courses (Information Technology Electives) from:			
Subject Area	Catalogue Number	Name	Credit Points
ISYS	2403	Advanced Distributed Systems	12
COSC	1204	Agent-oriented Programming and Design	12
COSC	2123	Algorithms and Analysis	12
COSC	2269	AI Concepts and Applications	12
COSC	1127	Artificial Intelligence	12
COSC	1235	Broadcast Network Applications	12
COSC	1107	Computing Theory	12
COSC	2404	Database Administration	12
COSC	2406	Database Systems	12
COSC	2271	Digital Media Computing	12
COSC	2104	Document Markup Languages	12
COSC	2353	E-Commerce and Enterprise Systems	12
COSC	1207	Evolutionary Computing	12
COSC	1187	Interactive 3D Graphics and Animation	12
COSC	1197	Distributed Systems	12
INTE	2425	Introduction to Network Security	12
ISYS	1073	Knowledge and Data Warehousing	12
COSC	1208	Mathematical Logic and Logic Programming	12
COSC	2309	Mobile Application Development	12

COSC	1179	Network Programming	12
COSC	1254	Object Oriented Programming	12
COSC	1114	Operating Systems Principles	12
COSC	1284	Programming Techniques	12
COSC	2391	Software Architecture: Design & Implementation	12
COSC	1226	Real-time Rendering and 3D Games	12
COSC	1093	Scripting Language Programming	12
INTE	1071	Secure E-Commerce	12
INTE	2402	Secure Programming Environments	12
COSC	2299	Software Engineering: Process and Tools	12
COSC	1133	Unix Systems Administration	12
COSC	1221	User Interface Programming	12
ISYS	1126	Web Database Applications	12
COSC	2276	Web Development Technologies	12
COSC	1301	Web Servers and Web technology	12
COSC	2424	Windows System Administration	12

AND

Complete Two (2) Courses from:			
Subject Area	Catalogue Number	Course Title	Credit Points
COSC	1235	Broadcast Network Applications	12
INTE	2425	Introduction to Network Security	12
COSC	1179	Network Programming	12
COSC	2309	Mobile Application Development	12

AND

Complete Two (2) Course from one of the minor streams (Tables in Pages 19 – 22)			
Subject Area	Catalogue Number	Course Title	Credit Points
		Minor Course 1	12
		Minor Course 2	12

AND

Complete two (2) Courses from:			
Subject Area	Catalogue Number	Course Title	Credit Points
		Student Elective	12
		Student Elective	12

Plan 5 – System Administration Major: BP162SYS8

Year	Semester	BP162SYS8 – Bachelor of Information Technology (System Administration)			
2	Sem 1	Data Communication and Net-centric Computing	Programming 2	Windows Systems Administration	Second Major/ Minor/ IT Elective 1
	Sem 2	Professional Computing Practice	Software Architecture: Design & Implement	Unix Essentials	Second Major/ Minor/ IT Elective 2
3	Sem 1	Student Elective	CS Elective	Unix Systems Administration	Second Major/ Minor/ IT Elective 3
	Sem 2	Student Elective	CS Elective	Major Study Course 4	Second Major/ Minor/ IT Elective 4

Year Two

Total Credit Points = 96

Complete Six (6) Courses from:			
Subject Area	Catalogue Number	Course Title	Credit Points
COSC	1111	Data Communication and Net-centric Computing	12
COSC	1076	Programming 2	12
COSC	2391	Software Architecture: Design and Implementation	12
COSC	1147	Professional Computing Practice	12
COSC	2424	Windows Systems Administration	12
COSC	2412	Unix Essentials	12

AND

Complete Two (2) Courses from one of the minor streams (Tables in Pages 19 – 22)			
Subject Area	Catalogue Number	Course Title	Credit Points
		Minor Course 1	12
		Minor Course 2	12

Year Three

Total Credit Points = 96

Complete One (1) Course from:			
Subject Area	Catalogue Number	Course Title	Credit Points
COSC	1133	Unix Systems Administration	12

AND

Complete One (1) Course from:			
Subject Area	Catalogue Number	Course Title	Credit Points
COSC	2385	CCNA Into	12
COSC	2384	CCNA ICND	12

COSC	2404	Database Administration	12
INTE	2425	Introduction to Network Security	12
COSC	1093	Script Language Programming	12
COSC	1301	Web Servers and Web Technology	12

AND

Complete Two (2) Courses (Information Technology Electives) from:			
Subject Area	Catalogue Number	Name	Credit Points
ISYS	2403	Advanced Distributed Systems	12
COSC	1204	Agent-oriented Programming and Design	12
COSC	2123	Algorithms and Analysis	12
COSC	2269	AI Concepts and Applications	12
COSC	1127	Artificial Intelligence	12
COSC	1235	Broadcast Network Applications	12
COSC	1107	Computing Theory	12
COSC	2404	Database Administration	12
COSC	2406	Database Systems	12
COSC	2271	Digital Media Computing	12
COSC	2104	Document Markup Languages	12
COSC	2353	E-Commerce and Enterprise Systems	12
COSC	1207	Evolutionary Computing	12
COSC	1187	Interactive 3D Graphics and Animation	12
COSC	1197	Distributed Systems	12
INTE	2425	Introduction to Network Security	12
ISYS	1073	Knowledge and Data Warehousing	12
COSC	1208	Mathematical Logic and Logic Programming	12
COSC	2309	Mobile Application Development	12
COSC	1179	Network Programming	12
COSC	1254	Object Oriented Programming	12
COSC	1114	Operating Systems Principles	12
COSC	1284	Programming Techniques	12
COSC	2391	Software Architecture: Design & Implementation	12
COSC	1226	Real-time Rendering and 3D Games	12
COSC	1093	Scripting Language Programming	12
INTE	1071	Secure E-Commerce	12
INTE	2402	Secure Programming Environments	12

COSC	2299	Software Engineering: Process and Tools	12
COSC	1133	Unix Systems Administration	12
COSC	1221	User Interface Programming	12
ISYS	1126	Web Database Applications	12
COSC	2276	Web Development Technologies	12
COSC	1301	Web Servers and Web technology	12
COSC	2424	Windows System Administration	12

AND

Complete Two (2) Courses from one of the minor streams (Tables in Pages 19 – 22)			
Subject Area	Catalogue Number	Course Title	Credit Points
		Minor Course 1	12
		Minor Course 2	12

AND

Complete two (2) Course from:			
Subject Area	Catalogue Number	Course Title	Credit Points
		Student Elective	12
		Student Elective	12

Plan 6 – Web Systems Major: BP162WEB8

Year	Semester	BP162WEB8 – Bachelor of Information Technology (Web Systems)			
2	Sem 1	Data Communication and Net-centric Computing	Programming 2	Web Servers and Web Technology	Second Major/ Minor/ IT Elective 1
	Sem 2	Professional Computing Practice	Software Architecture: Design & Implement	Major Study Course 2	Second Major/ Minor/ IT Elective 2
3	Sem 1	Student Elective	CS Elective	Major Study Course 3	Second Major/ Minor/ IT Elective 3
	Sem 2	Student Elective	CS Elective	Major Study Course 4	Second Major/ Minor/ IT Elective 4

Year Two

Total Credit Points = 96

Complete Five (5) Courses from:			
Subject Area	Catalogue Number	Course Title	Credit Points
COSC	1111	Data Communication and Net-centric Computing	12
COSC	1076	Programming 2	12
COSC	2391	Software Architecture: Design and Implementation	12
COSC	1147	Professional Computing Practice	12
COSC	1301	Web Servers and Web Technology	12

AND

Complete One (1) Course from:			
Subject Area	Catalogue Number	Course Title	Credit Points
COSC	2104	Document Markup Languages	12
COSC	2353	E-Commerce and Enterprise Systems	12
INTE	1071	Secure E-Commerce	12
ISYS	1126	Web Database Applications	12
COSC	2276	Web Development Technologies	12

AND

Complete Two (2) Courses from one of the minor streams (Tables in Pages 19 – 22)			
Subject Area	Catalogue Number	Course Title	Credit Points
		Minor Course 1	12
		Minor Course 2	12

Year Three

Total Credit Points = 96

Complete Two (2) Courses (Information Technology Electives) from:			
Subject Area	Catalogue Number	Name	Credit Points
ISYS	2403	Advanced Distributed Systems	12
COSC	1204	Agent-oriented Programming and Design	12
COSC	2123	Algorithms and Analysis	12
COSC	2269	AI Concepts and Applications	12
COSC	1127	Artificial Intelligence	12
COSC	1235	Broadcast Network Applications	12
COSC	1107	Computing Theory	12
COSC	2404	Database Administration	12
COSC	2406	Database Systems	12
COSC	2271	Digital Media Computing	12
COSC	2104	Document Markup Languages	12
COSC	2353	E-Commerce and Enterprise Systems	12
COSC	1207	Evolutionary Computing	12
COSC	1187	Interactive 3D Graphics and Animation	12
COSC	1197	Distributed Systems	12
INTE	2425	Introduction to Network Security	12

ISYS	1073	Knowledge and Data Warehousing	12
COSC	1208	Mathematical Logic and Logic Programming	12
COSC	2309	Mobile Application Development	12
COSC	1179	Network Programming	12
COSC	1254	Object Oriented Programming	12
COSC	1114	Operating Systems Principles	12
COSC	1284	Programming Techniques	12
COSC	2391	Software Architecture: Design & Implementation	12
COSC	1226	Real-time Rendering and 3D Games	12
COSC	1093	Scripting Language Programming	12
INTE	1071	Secure E-Commerce	12
INTE	2402	Secure Programming Environments	12
COSC	2299	Software Engineering: Process and Tools	12
COSC	1133	Unix Systems Administration	12
COSC	1221	User Interface Programming	12
ISYS	1126	Web Database Applications	12
COSC	2276	Web Development Technologies	12
COSC	1301	Web Servers and Web technology	12
COSC	2424	Windows System Administration	12

AND

Complete Two (2) Courses from:			
Subject Area	Catalogue Number	Course Title	Credit Points
COSC	2104	Document Markup Languages	12
COSC	2353	E-Commerce and Enterprise Systems	12
INTE	1071	Secure E-Commerce	12
ISYS	1126	Web Database Applications	12
COSC	2276	Web Development Technologies	12

AND

Complete Two (2) Courses from one of the minor streams (Tables in Pages 19 – 22)			
Subject Area	Catalogue Number	Course Title	Credit Points
		Minor Course 1	12
		Minor Course 2	12

AND

Complete two (2) Courses from:			
Subject Area	Catalogue Number	Course Title	Credit Points
		Student Elective	12
		Student Elective	12

Minor Study Streams:

Minor study streams are made up of four (4) courses each. You must do 2 minor courses in your second year, and two further courses from the same minor stream in the third year.

Complete Two (2) Courses from (Accounting and Law Minor):			
Subject Area	Catalogue Number	Course Title	Credit Points
ACCT	1046	Introductory Accounting	12
JUST	1016	Commercial Law	12
ACCT	2033	Financial Accounting	12
ACCT	1048	Corporate Accounting	12
ACCT	1056	Auditing 1	12
ACCT	1022	Small Business and the Accountant	12
ACCT	1028	Company Law	12
ACCT	1060	Management Accounting and Business	12
ACCT	1064	Cost Management and Applications	12
ACCT	1014	Management Accounting Systems	12
JUST	1031	Taxation 1	12
JUST	1046	Taxation 2	12

OR

Complete Two (2) Courses from (Applied Communication Minor):			
Subject Area	Catalogue Number	Course Title	Credit Points
COMM	2113	The Media: Australian and Global	12
COMM	2112	Theories of Communication and Persuasion	12
COMM	2072	Reading Media Texts	12
COMM	2147	Professional Writing	12
COMM	2336	Asian Cybercultures	12
GRPH	2175	Introduction to Graphic Design	12
COMM	1161	Introduction to Public Relations	12
COMM	2138	Modern Asia	12
COMM	1033	Australian Cinema	12

MKTG	1208	Introduction to Advertising	12
COMM	1086	Mass Media in Asia	12
COMM	2142	PR Practice and Writing	12

OR

Complete Two (2) Courses from (Economics, Finance, and Marketing Minor):			
Subject Area	Catalogue Number	Course Title	Credit Points
ECON	1020	Prices and Markets	12
ECON	1010	Macroeconomics 1	12
ENVI	1051	Environmental Economics	12
HUSO	1081	Asian Economic Development	12
BAFI	1008	Business Finance	12
BAFI	1018	International Finance	12
BAFI	1002	Financial Markets	12
MKTG	1025	Marketing Principles	12
MKTG	1050	Buyer Behaviour	12
MKTG	1073	International Business Strategy	12
MKTG	1087	Retailing	12

OR

Complete Two (2) Courses from (Entrepreneurship Minor):			
Subject Area	Catalogue Number	Course Title	Credit Points
BUSM	1311	The Entrepreneurial Process	12
BUSM	1314	Entrepreneurial Ventures 1	12
MKTG	1001	Marketing for Entrepreneurs	12
BUSM	1313	Finance for Entrepreneurs	12

OR

Complete Two (2) Courses from (Logistics Minor):			
Subject Area	Catalogue Number	Course Title	Credit Points
OMGT	1082	Intro to Logistics & Supply Chain Management	12
OMGT	1044	Services Management	12
OMGT	1070	Procurement Management	12
OMGT	1053	Advanced Supply Chain Management	12

OR

Complete Two (2) Courses from (Management Minor):			
Subject Area	Catalogue Number	Course Title	Credit Points
BUSM	3118	History of Management Thought	12
BUSM	3123	Organisational Theory	12
OMGT	1082	Intro to Logistics & Supply Chain Management	12
BUSM	1311	The Entrepreneurial Process	12
BUSM	3115	Ethics and Governance	12
BUSM	3125	Strategic Management	12
BUSM	1202	Managing Change	12
BUSM	1222	International Management	12
BUSM	3117	Health Care Systems and Structures	12

OR

Complete Two (2) Courses from (Statistics Minor):			
Subject Area	Catalogue Number	Course Title	Credit Points
MATH	1276	Statistical Computing	12
MATH	1278	Statistics	12
MATH	1280	Statistical Analysis 1	12
MATH	1282	Statistical Analysis 2	12
MATH	1288	Operations Research Models 1A	12
MATH	1289	Operations Research Models 1B	12

OR

Complete Two (2) Courses (Information Technology Electives) from:			
Subject Area	Catalogue Number	Name	Credit Points
ISYS	2403	Advanced Distributed Systems	12
COSC	1204	Agent-oriented Programming and Design	12
COSC	2123	Algorithms and Analysis	12
COSC	2269	AI Concepts and Applications	12
COSC	1127	Artificial Intelligence	12
COSC	1235	Broadcast Network Applications	12
COSC	1107	Computing Theory	12
COSC	2404	Database Administration	12
COSC	2406	Database Systems	12

COSC	2271	Digital Media Computing	12
COSC	2104	Document Markup Languages	12
COSC	2353	E-Commerce and Enterprise Systems	12
COSC	1207	Evolutionary Computing	12
COSC	1187	Interactive 3D Graphics and Animation	12
COSC	1197	Distributed Systems	12
INTE	2425	Introduction to Network Security	12
ISYS	1073	Knowledge and Data Warehousing	12
COSC	1208	Mathematical Logic and Logic Programming	12
COSC	2309	Mobile Application Development	12
COSC	1179	Network Programming	12
COSC	1254	Object Oriented Programming	12
COSC	1114	Operating Systems Principles	12
COSC	1284	Programming Techniques	12
COSC	2391	Software Architecture: Design & Implementation	12
COSC	1226	Real-time Rendering and 3D Games	12
COSC	1093	Scripting Language Programming	12
INTE	1071	Secure E-Commerce	12
INTE	2402	Secure Programming Environments	12
COSC	2299	Software Engineering: Process and Tools	12
COSC	1133	Unix Systems Administration	12
COSC	1221	User Interface Programming	12
ISYS	1126	Web Database Applications	12
COSC	2276	Web Development Technologies	12
COSC	1301	Web Servers and Web technology	12
COSC	2424	Windows System Administration	12

Program Progression Rules

The program is structured so that capabilities are developed sequentially through the three years. Assumed prerequisite capabilities are listed for each course in the individual course guides. You are strongly advised against enrolling in courses for which you do not have the required prerequisites, unless prior approval has been obtained from the Program Leader. Failure in one or more courses may make it impossible for you to complete the program within the minimum three-year period.

You are required to successfully complete all required courses in a major to graduate with the major in the title of your award.

4. External Accreditation and Industry Links

This program is accredited at professional level by the Australian Computer Society, which accredits Information and Communication Technology related programs in Australia.

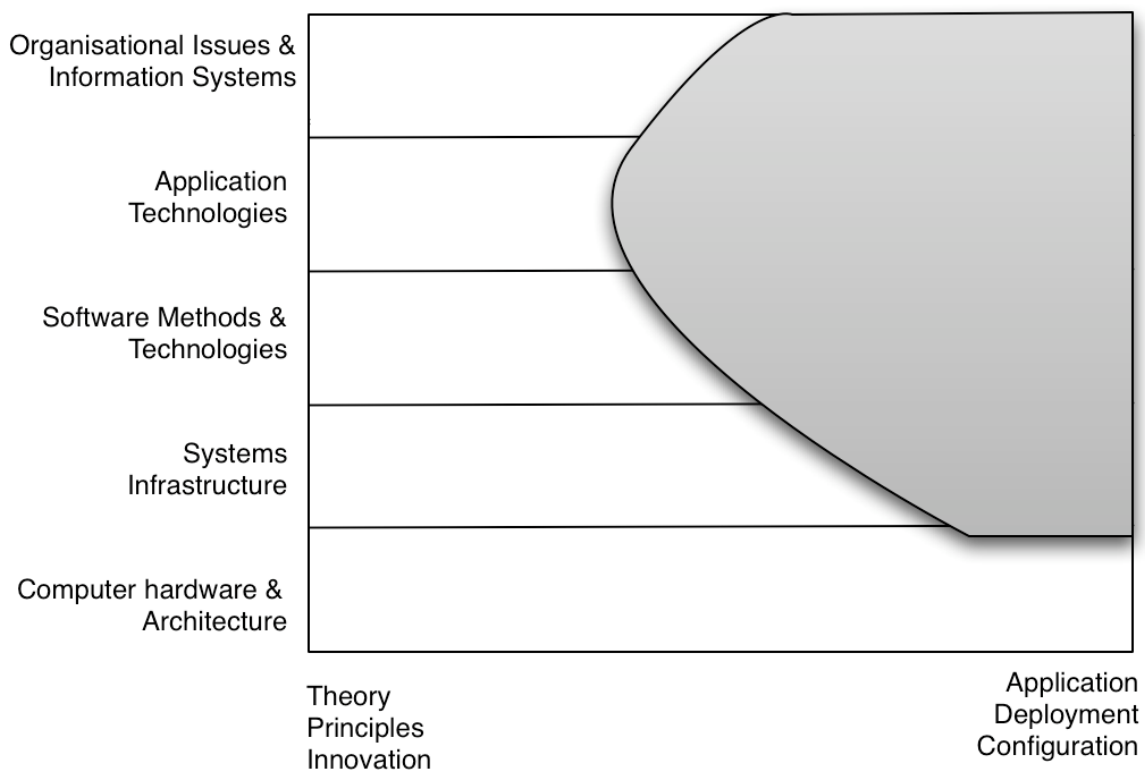
The School has a very strong Industry Advisory Committee (in some Schools called the “program advisory committee”), which is the main link to industry. Membership includes staff from major IT companies with global and local presence. The committee meets quarterly and provides feedback on the currency of our programs, the changing needs of Industry and has input into the design of new programs. It also actively contributes to the School through participation in seminars, marketing events, industry awards and scholarships.

5. Objectives of the Program

The School of Computer Science and Information Technology has a strong tradition of “hands on” teaching, providing students with the opportunity to mix course content and practical experience. This approach, coupled with our close involvement with industry, produces graduates who are highly regarded in the workplace. The curricula used in our various degree programs reflect these needs incorporating cutting-edge technologies while maintaining a good coverage of theoretical and algorithmic foundations of computer science, information technology, and software engineering. The Information Technology degree, in particular, develops a skills set that provides a solid foundation to application technologies, systems infrastructure, and organisational information systems and introduces cutting edge technologies in various aspects of Computer Science and Information Technology.

The curriculum guidelines for undergraduate degrees compiled by the joint task force of IEEE Computer Society and the Association of Computing Machinery provide a two-dimensional characterisation of the entire computing discipline. One dimension describes the depth of coverage between more theoretical aspects and more applied aspects. The other dimension describes the breadth of coverage of topics between lower-level computer hardware and architecture focused coverage and higher-level organisational issues and information systems focused coverage¹.

The shaded area of the following diagram represents the coverage domain of the Information Technology degree. This degree program provides an extensive treatment of application technologies, organisational issues and information systems, and software technologies from a more application and deployment perspective. In addition, as information technologists are expected to have some understanding of all aspects of computing, some treatment of computer hardware and systems infrastructure issues will also be provided. This degree program concentrates on developing capabilities in application and deployment of products to the organisational needs; it is not intended to build capabilities in theory, principles, and innovation of these topics.



¹ http://www.acm.org/education/curric_vols/CC2005-March06Final.pdf

This program was developed based on the recommendations of the curriculum development joint task force of IEEE Computer Society and Association of Computing Machinery. It was developed through a formal consultation process with a number of stakeholders, including the School's Industry Advisory Committee, academic staff of the school, alumni, and current students. This process resulted in the identification of the following graduate capabilities that are required of a computer science graduate to successfully engage in a professional capacity in the relevant field of industry of the 21st century.

6. Statement of capabilities

The graduate capabilities developed by the Information Technology degree program are composed of the following dimensions:

- **Enabling Knowledge**
This capability allows one to apply knowledge effectively to new situations and learn from the experience.
- **Critical Analysis**
In general, this capability allows one to examine and consider accurately and objectively any topic, evidence, or situation.
More specifically, this capability allows one to:
 - Analyse and model requirements and constraints for the purpose of designing and implementing software systems;
 - Evaluate and compare designs of such systems on the basis of requirements of the organisational needs.
- **Problem Solving**
In general, this capability allows one to analyse problems and synthesise suitable solutions.
Specifically, this capability allows one to:
 - Design and implement software systems that accommodate specified requirements and constraints, based on analysis or modelling or requirements specification
- **Communication**
In general, this capability allows one to communicate effectively with a variety of audiences through a range of modes and media.
Specifically, this capability allows one to:
 - Present and explain complex software systems solutions, alternative solutions, and decision recommendations to both IT and non-IT personnel via technical reports of professional standard and technical presentations.
- **Team Work**
In general this capability allows one to work as an effective and productive team member in a range of professional and social situations.
Specifically, this capability allows one to:
 - Work effectively in different roles, to form, manage, and successfully produce outcomes from teams, whose members may have diverse cultural backgrounds and life circumstances, and differing levels of technical expertise.
- **Responsibility**
In general this capability refers to accepting responsibility for one's own learning and make informed decisions in judging and adopting appropriate behaviour in professional and social situations. This includes accepting the responsibility for life-long learning.
Specifically, this capability allows to:
 - Effectively apply relevant standards, ethical considerations, and an understanding of legal and privacy issues to designing software systems.

7. An approach to Teaching and Learning (including a statement on assessment)

RMIT has a commitment to the principle of student-centred learning: that learning is most meaningful when topics are relevant to your life, needs, and interests and when learning activities actively engage you in creating,

understanding, and connecting to knowledge². The teaching and learning methods used in this program aim to implement student-centred learning by recognizing that your perceptions of the world are important and relevant, and encouraging you to actively participate in your learning, and to develop solutions in collaboration with your peers. Learning activities include practical exercises, case study analysis, oral presentations, technical and business reports, and individual and group project work.

Lectures (some presented by industry experts) are used to convey some of the basic information necessary for each part of the various courses. Smaller tutorials or laboratory sessions are then used to explore the ideas raised in the lectures, or to give you hands-on experience of technologies. In tutorials, you will often work in a smaller sub-group of about 5 students, to ensure there is real scope for genuinely interactive discussions. Most courses use carefully constructed tutorial questions to illustrate key concepts and to help you develop your understanding. Course materials (printed course notes, textbooks and reference books) are available from the RMIT Bookshop; the RMIT Library has copies of the books and also provides online access to electronic books and journals; course web pages contain links that let you download worksheets and assignment specifications, email teaching staff, and access message forums, as well as links to external course-related web sites. Lecturers provide additional suitably formatted electronic files and handouts to visually impaired students upon request.

Assessment

The school views teaching and learning as a cyclic activity, with assessment and evaluation driving planning and teaching. Assessment is an integral part of learning: information derived from assessment activities is used to facilitate student learning and development, and to improve the quality of the school's programs, services and facilities. Assessment activities examine processes as well as products, and are designed to measure your work against standards, not against other students. As no one assessment can capture the full range of student learning and academic growth, courses use multiple assessments to evaluate what you know and are able to do and to inform adjustments to learning activities.

Assessment is developmental and continuous: that is, you have the opportunity to learn by building on what you already know and are able to do and to carry forward these skills and knowledge to expanded and more complex uses. To reflect industry practice in this area, as you progress through assessments at each level of the program, you are expected to demonstrate at increasingly higher levels of complexity and integration, the knowledge and capabilities set forth in the program standards.

Formative assessment progresses from tutorial exercises and self-test quizzes in foundation courses to participation in seminar discussions, moderated by the lecturer, in some elective courses, to seminar-style discussions in key courses, where you present additional topics in the course material, and apply your knowledge of earlier topics to recognize underlying principles and potential applications of new topics. Some courses involve group meetings and discussions relating to assignments, and participation in case study sessions within groups and with key input and guidance from lecturers and industry experts. Tutorial exercises allow you to explore team dynamics, diagnostics, and management issues.

Summative assessment also becomes more demanding as you progress from foundation courses to electives and key courses:

- The core courses focus on key concepts and initial capability development: most assessment activities are based on individual skills and capabilities, and ask you to apply fixed "toolsets" to familiar, well-defined problems, to demonstrate that you have grasped the necessary technical foundations and relevant technologies;
- Elective courses require more complex, open problem-solving, with assignments that require you to design or evaluate solutions for problems with complex or conflicting requirements, or to compare alternative solutions for such problems. In most elective courses, assessment activities also emphasize additional graduate capabilities such as written communication, where you demonstrate that you can integrate concepts and arguments into technical or business reports, or literature reviews of relevant standards, ethical considerations, and applicable research. Some elective courses involve group-focussed assessment.
- Assessment of minor courses vary widely among different minor study streams mainly due to substantial differences in the disciplines covered in these minor study areas. You will be advised by an academic advisor about the specific instruments of assessment once you have chosen the minor study area.

In order to be a lifelong learner, you must be able to evaluate your own work. To support this, some group work is peer-assessed, i.e., following criteria specified by the lecturer, or agreed upon by your class, you assess, and are assessed by, the other members of your group. This is in keeping with student-centred learning, and also helps to

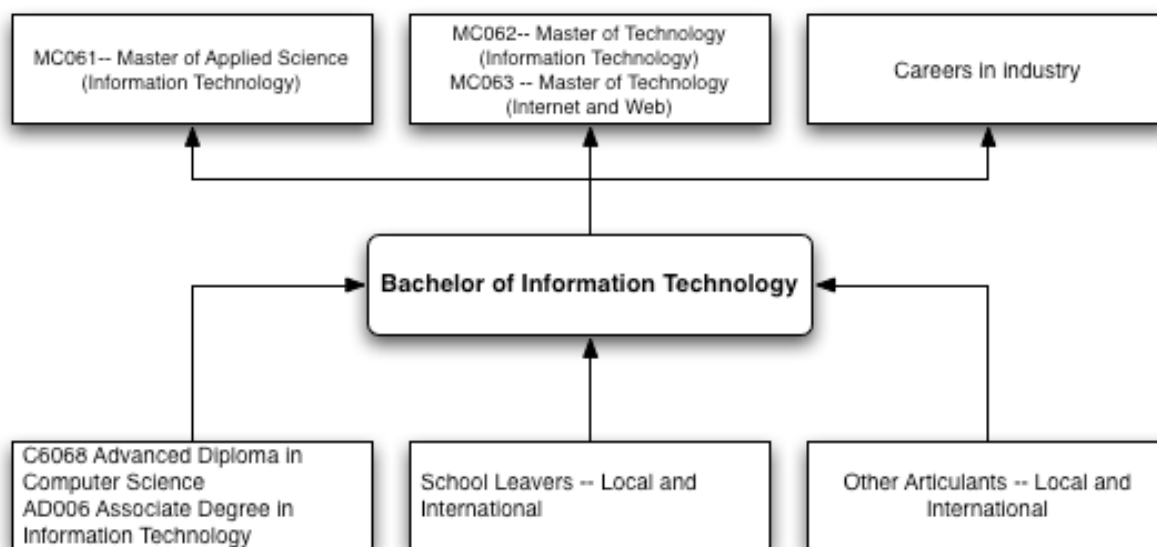
² McCombs, B. and Whistler, J.S. (1997). *The Learner-Centered Classroom and School: Strategies for Increasing Student Motivation and Achievement*. San Francisco: Josey-Bass Publishers.

alleviate a major misgiving about group work - the possibility of some group members being "carried" by the other members.

Most courses in this program also require you to sit a written examination at the end of the semester, worth between 35% (key) and 60% (foundation) of your final result.

A portfolio is a collection of evidence that you prepare to demonstrate mastery, comprehension, application, and synthesis of this program's concepts. Many of the learning and assessment activities described in this and the previous section can contribute to your portfolio of evidence, in particular, your individual assignments, and your [journal of your] contributions to group activities (case study analyses, presentations, technical and business reports, and group project work).

8. Articulation and Pathways



The following tables indicate how this program articulates with other programs (TAFE, HE – UG and PG) at RMIT highlighting educational pathways, and indicates to students with existing qualifications the extent of exemptions.

Source Program	Owning school	Credit towards this program		Academic requirement for entry	Terms of entry (guaranteed place, merit, etc)	Date of agreement & expiry
		Courses	Time			
AD006 – Associate Degree (Information Technology)	School of Life and Physical Sciences	Introduction to Information Technology Introduction to Programming Computer Organisation Mathematics for Computing Programming 1 Database Concepts	2 years	Pass	Merit	

		<p>Web Programming</p> <p>Software Engineering Fundamentals</p> <p>Programming 2</p> <p>Data Communication and Net-centric Computing</p> <p>4 Minor courses</p> <p>2 Student Electives</p>				
C6068 - Advanced Diploma of Computer Science	School of Life and Physical Sciences	<p>Introduction to Information Technology</p> <p>Introduction to Programming</p> <p>Computer Organisation</p> <p>Mathematics for Computing</p> <p>Programming 1</p> <p>Data Communication and Net-centric Computing</p> <p>4 Minor courses</p> <p>2 Student Electives</p>	1.5 years	Must obtain a CGPA of 2.0 (Credit Average) or above.	Merit	

Destination Program	Owning school	Credit from this program towards destination program		Academic requirement for entry	Terms of entry (guaranteed place, merit, etc)	Date of agreement & expiry
		Courses	Time			
MC061 – Master of Applied Science (Information Technology)	School of Computer Science & IT		0	<p>Must obtain a CGPA of 2.0 or above and complete following electives:</p> <p>Programming Techniques</p> <p>Algorithms and Analysis</p> <p>Computing Theory</p> <p>Database Systems</p>	Merit	
MC062 – Master of Technology (Information Technology)	School of Computer Science & IT	4 Stage A and B courses in MC062	0.5 yrs	Must obtain a CGPA of 2.0 or above.	Merit	

9. Entrance requirements

Local Students

*Year 12 VCE equivalent
VCE Units 3 & 4 English (any) and mathematics (any).*

International Students

*An English IELTS language test score of 6.5 with no band less than 6.0 or equivalent.
A unit of mathematics to year 12 VCE standard.*

10. Library, IT and specialist resources

RMIT Library already holds or has ordered all prescribed and recommended books. A limited number of copies of books will be available from the Library; some may be available electronically via Safari Bookshelf or electronic journals. This program will be delivered only in on-campus mode.

No additional IT or specialist resources are required to support the new courses. You will use IT facilities within the school. Special software required, such as Visual Paradigm, is already licensed and installed.

11. Student expenses and charges in addition to fees

Expenses other than university tuition fees may be expected in relation to purchase of lecture notes, textbooks, stationery, consumables such as printer paper, fees levied by commercial internet service providers for internet access outside of the university campus, and other relevant costs.

12. Program Transition Plan

The proposed amendments (effective from Sem1, 2008) are for the purpose of inclusion of a few electives into the Computer Science elective list. Therefore, no transition plan is required.

Capability Matrix

Capability	Introduction to Programming	Introduction to Information Technology	Computer Organisation	Mathematics for Computing	Programming 1	Web Programming	Database Concepts	Software Engineering Fundamentals	Data Communication s and Net-Centric Computing	Programming 2	Professional Computing Practice	Programming 3
Enabling Knowledge	F	F	F	F	C	F	F	F	F	C	F	A
Critical Analysis	F	F						F		C	F	A
Problem Solving	F		F	F	F	F	F	C	F	C	C	A
Communication		F						C			A	
Team Work								F			F	F
Responsibility	F	F						C				

F – Foundation-level skills

C – Consolidated skills

A – Advanced skills