Master of Technology (Enterprise Architecture)

School:	Computer Science and Information Technology
Portfolio:	Science, Engineering and Technology
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1. Program title and Abbreviated title of award (for each stream as required)

Master of Technology (Enterprise Architecture) / M Tech (Ent Arch)

Graduate Diploma in Enterprise Architecture / G Dip Ent Arch

2. Accreditation

The Masters program will be accredited at professional level by the Australian Computer Society, which accredits Computer Science, Information Technology, and Information Systems programs. Accreditation is for five years, effective from 2006.

3. Statement of capabilities

An enterprise architecture is an overall framework and strategic objective for the usage of technology over time across an organization; it provides a plan and objectives that align business goals with ICT strategy, to enable the organization to make the most effective use of ICT to support and build the business. An enterprise architect is a technical professional who is able to mediate between the business and ICT sectors of an organization, helping to align the organization's ICT strategy with its business goals and strategy. The need for enterprise architecture arises from the ever-increasing complexity of businesses (mergers etc) and ICT, and from organizations' ever-increasing dependence on ICT to achieve/improve business outcomes. Interest in Enterprise Architecture has grown rapidly in recent years, and many IT solutions providers in Australia and internationally have reported a serious shortage of enterprise architects. The need for this program was also made evident by international legislation and government regulations, for example:

"[T]he [US] federal government now mandates the use of enterprise architectures (EAs) by federal agencies seeking to obtain funding for any significant IT investment . the government's requirement for EAs [is] codified in the Office of Management and Budget's (OMB's) Circular A-130" [1]

This program was developed after extensive consultation with companies represented on the school's Industry Advisory Committee and other Australian and international organizations, to ensure that its graduates acquire the set of capabilities that will be most useful to industry. There is student demand for this program, in terms of the opportunity it provides to further explore the concepts introduced in ISYS1088 Systems Architecture.

This is a postgraduate coursework program, intended for ICT professionals who wish to advance their career to the role of Enterprise Architect within an organization. The program structure integrates IT and business capabilities and knowledge by including courses from the School of Business Information Technology, including one of three key courses that have been developed specifically for this program. The key courses Systems Architecture, Enterprise Architecture, and IT Governance & Change Management build on the foundation courses and CSIT electives. They form the basis for the capstone course Enterprise Architecture Case Studies, where you will interact with practising enterprise architects and work in teams, bringing together your acquired abilities and skills to develop solutions to realistic problems. The overall purpose of the Masters program is to enable you to:

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[1] http://www.mitre.org/news/the_edge/fall_03/tucker.html viewed 20 June 2005:
Enterprise Architecture: Roadmap for Modernization by Rick Tucker and Dennis Debrosse

- architect cost-effective Enterprise IT architectures and systems, drawing on an understanding of business strategy, to help to achieve the business goals of the Enterprise;
- develop and maintain an enterprise architecture for an organization, taking into account its strategic plan, current IT portfolio, and key business and ICT industry drivers and technologies, including hardware and software standards;
- communicate and market an enterprise architecture to the organization and oversee its implementation, including being able to communicate, to both IT and business audiences, how an enterprise architecture supports the organization's strategic IT objectives and plans;
- develop the required governance for successful enterprise architecture development and adoption within organizations to support business & technology strategy.

The Graduate Diploma in Enterprise Architecture is available if you require less depth, or if you choose to exit the Masters program after eight courses. This program contains only one course from the School of Business Information Technology, only one course in large-scale software systems development, and only Systems Architecture and Enterprise Architecture from the key courses. The capabilities developed by the Graduate Diploma are consequently less comprehensive than those developed by the Masters program.

The capabilities developed by the Masters program are composed of the following dimensions:

Critical Analysis:

- Ability to analyse and model an enterprise's IT and business requirements and constraints for the purpose of enterprise architectures, IT governance structures and strategies for change
- Ability to evaluate and compare enterprise architectures, IT governance structures and strategies for change, on the basis of an enterprise's IT and business requirements and constraints

Problem Solving:

- Ability to design and implement enterprise architectures, IT governance structures and strategies for change that accommodate an enterprise's IT and business requirements and constraints

Communication: Upon completion of this program, you will be able to:

Effectively motivate and explain complex IT concepts, relevant alternatives and decision recommendations to both non-IT and IT specialists, via business and technical reports and/or oral presentations, including:

1. IT strategy, IT governance and change management issues
2. an IT governance structure and associated processes, and also required supporting change management initiatives
3. how an enterprise architecture supports an organization's strategic IT objectives and plans
4. suitable process documentation, models, evaluation frameworks, and presentation material for enterprise architectures, for all appropriate audiences.

The audiences for these communications will range from executives, and board members to newly hired graduates, and their expertise will range from extensive business capabilities to world-class technical skills.

Teamwork: Upon completion of this program, you will be able 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 and/or business experience

- Recognise stakeholders in an organization's computing environment when developing and communicating enterprise architectures, and apply skills to develop appropriate interaction strategy.

Responsibility: Upon completion of this program, you will be able to:

- Effectively apply relevant standards, ethical considerations, and an understanding of legal issues to designing IT governance structures and change management strategies Effectively apply privacy and ethical considerations to evaluations, recommendations and decisions relating to enterprise architecture
- Effectively apply relevant standards and an understanding of legal issues relating to enterprise architecture to evaluations, recommendations and decisions relating to enterprise architecture

Leadership: Upon completion of this program, you will be able to:

- Lead small teams in the evaluation, production and communication of enterprise architectures, associated IT governance processes, and supporting change management activities

4. Program Structure

Program Components	Courses
Four compulsory foundation courses will enable students who have learned to build software systems "on the job" to formalize their understanding of the fundamental concepts of software development, and will provide an understanding of IT business strategy to students from a mostly-technical background. [Graduate Diploma: IT Strategy is optional.]	ISYS1117 Software Engineering Analysis & Design ISYS1055 Introduction to Database Systems COSC1295 Java for Programmers INTE1030 IT Strategy (Business IT course)
One elective from Group A (application of CSIT foundation courses) provides additional context for the Group C electives and key CSIT courses.	COSC2106 Document Markup Languages COSC2229 Electronic Commerce & Enterprise Systems COSC2277 Web Development Technologies INTE1070 Secure Electronic Commerce
One elective from Group B (Business IT courses) adds to your understanding of business organization and goals. [Graduate Diploma: these options plus IT Strategy.]	BUSM2112 Business Background INTE1014 IT Industry ISYS1033 Introduction to IT Project Mgmt INTE1214 e-Business Models and Trends
Two electives from Group C (advanced CSIT courses) expose you to more advanced concepts in developing large-scale software systems development, providing additional technical and user-focused context for the key CSIT courses. [Graduate Diploma: one elective from this group.]	COSC1168 Internet and Intranet Document Engineering COSC1182 Usability Engineering COSC2275 Software Requirements Engineering COSC2279 Web Services ISYS1081 Software Reuse ISYS1085 Software Testing
The **key courses** Systems Architecture, Enterprise Architecture, and IT Governance & Change Management build on the foundation courses and CSIT electives. They form the basis for the capstone course Enterprise Architecture Case Studies, where	ISYS1088 Systems Architecture (new) Enterprise Architecture (new) IT Governance & Change Management (Business IT course) (new) Enterprise Architecture Case Studies

you will interact with practising enterprise architects and work in teams, bringing together your acquired abilities and skills to develop solutions to realistic problems. [Graduate Diploma: ISYS1088 and Enterprise Architecture only.]	

Sample program structure for part-time study (February start shown; July start possible):

Year level	Semester	Credit points	Individual blocks represent 12 credit point courses:	
1	February	24	ISYS1117	ISYS1055
	July	24	COSC1295	INTE1030
	February	24	ISYS1088	Group A elective
	July	24	IT Gov & Change Mgmt	Group B elective
2	February	24	Ent Arch	Group C elective
	July	24	Ent Arch Case Studies	Group C elective

Sample program structure for full-time study (must commence in July semester in order to maintain full-time enrolment and to complete prerequisites in time to undertake Enterprise Architecture Case Studies, which is only offered in July semester):

Year level	Sem	Credit points	Individual blocks represent 12 credit point courses:			
1	July	48	ISYS1055	ISYS1117	COSC1295	INTE1030
	Feb	48	ISYS1088	Ent Arch	Grp A elective	Grp B elective
2	July	48	IT Gov & Change Mgmt	Ent Arch Case Studies	Grp C elective	Grp C elective

Program Capabilities Map:

Critical Analysis Analyse and model an enterprise's IT and business requirements and constraints for the purpose of designing enterprise architectures, IT governance structures and strategies for change Evaluate and compare enterprise architectures, IT governance structures and strategies for change, on the basis of an enterprise's IT and business requirements and constraints	
Courses	**Specific aspect developed**
ISYS1117	Determine and evaluate the requirements for a software system; model and analyse an object-oriented software system design
ISYS1088	Examine and deliberate accurately and objectively the potential for, and practicality of, developing systems architectures in specific scenarios
INTE1030	Assess strategic performance and evaluate management of information systems
INTE1030, IT Gov & Change Mgmt	Evaluate an IT governance structure, and strategies for change associated with the development of IT systems
Ent Arch	Identify and evaluate gaps and opportunities in different enterprise architecture models and processes
Ent Arch, Ent Arch Case Studies	Evaluate alternative enterprise architecture approaches Identify critical success factors for common and best practice enterprise

	architect approaches
Ent Arch Case Studies	Determine key factors in successful and unsuccessful enterprise architectures

Problem Solving

Design and implement enterprise architectures, IT governance structures and strategies for change that accommodate an enterprise's IT and business requirements and constraints

Courses	Specific aspect developed
ISYS1117	Use suitable industry-standard methodologies and tools to create high-level and detailed designs for a software system, based on a requirements specification document
ISYS1088	Use suitable industry-standard methodologies and tools to create a systems architecture, based on analysis and modelling of a specific scenario
INTE1030	Apply suitable industry-standard methodologies and tools to align IT and business strategies, based on analysis and modelling of a specific scenario
INTE1030, IT Gov & Change Mgmt	Design an IT governance structure, and strategies for change associated with the development of IT systems, based on analysis and modelling of a specific scenario
Ent Arch, Ent Arch Case Studies	Develop an enterprise architecture for an organization, taking into account its strategic plan, current IT portfolio, and key business and ICT industry drivers and technologies, including hardware and software standards

Communication

Effectively communicate complex IT concepts, relevant alternatives and decision recommendations to both non-IT and IT specialists, via business and technical reports and/or oral presentations; aspects of this capability will be developed in these courses:

Courses	Specific aspect developed
ISYS1117, Group A Elective, ISYS1088	Technical reports of professional standard and technical presentations to peers
INTE1030, IT Gov & Change Mgmt	Business reports of professional standard
Ent Arch, Ent Arch Case Studies	Business case reports of professional standard and technical business presentations to industry practitioners and peers
Ent Arch Case Studies	Communications plans for enterprise architectures, targeted at business executives and IT professionals

Teamwork

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 and/or business experience; aspects of this capability will be developed in these courses:

Courses	Specific aspect developed
ISYS1117, ISYS1088, IT Gov & Change Mgmt	Work as an effective and productive team member in projects that develop a software system, an enterprise architecture and an IT governance structure
Ent Arch, Ent Arch Case Studies	Recognise stakeholders in an organization's computing environment when developing and communicating enterprise architectures, and apply skills to develop appropriate interaction strategy

Responsibility	
Courses	**Specific aspect developed**

ISYS1117, ISYS1088	Effectively apply relevant standards and ethical considerations to designing software systems and systems architectures
INTE1030, IT Gov & Change Mgmt	Effectively apply relevant standards, ethical considerations, and an understanding of legal issues to designing IT governance structures and change management strategies
Ent Arch, Ent Arch Case Studies	Effectively apply privacy and ethical considerations to evaluations, recommendations and decisions relating to enterprise architecture Effectively apply relevant standards and an understanding of legal issues relating to enterprise architecture to evaluations, recommendations and decisions relating to enterprise architecture

Leadership

Lead small teams in the evaluation, production and communication of enterprise architectures, associated IT governance processes, and supporting change management activities; aspects of this capability will be developed in these courses:

Courses	Specific aspect developed
INTE1030, ITGCM	Apply an understanding of the critical importance of vision, organizational mission, scope, purpose and values in managing IT issues
ITGCM	Apply an understanding of the impact of good governance of IT for accountability, participation, predictability and transparency Apply a comprehension of change management issues in relation to new IT governance structures, IT technology standards, new responsibilities and reporting lines
Ent Arch Case Studies	Communicate and market an enterprise architecture to the organization and oversee its implementation Develop appropriate organization charts and associated responsibility statements related to enterprise architecture and associated governance Identify and plan appropriate leadership activities related to enterprise architectures and associated governance

Enabling Knowledge: You will acquire all of the above capabilities using a foundation of relevant concepts and knowledge. This enabling knowledge is communicated in the program's courses as indicated below:

Courses	Specific aspect developed
ISYS1117, COSC1295	An object-oriented software engineering process, and how to apply it to develop a specified software system Experience with industry-standard methodologies and tools for analysing and modelling software system requirements, and implementing software systems in an object-oriented programming language Practice in following industry-standard templates for documenting the design and implementation processes Teamwork principles, team roles and dynamics, project planning techniques
ISYS1088	Theoretical and practical issues in systems architecture, and practical experience with methods for developing such architectures; introduction to enterprise architecture
INTE1030, ISYS1088, Ent Arch	Processes typically employed to produce effective alignment of IT and business strategies, including an understanding of business strategy and of how to architect cost-effective enterprise IT architectures and systems to help to achieve the business goals of the enterprise
Ent Arch	Enterprise architecture principles and models of different aspects of enterprise

	architecture processes and artefacts
IT Gov & Change Mgmt	IT governance issues and change management issues in relation to new IT governance structures, IT technology standards, new responsibilities and reporting lines
INTE1030, IT Gov & Change Mgmt, Ent Arch Case Studies	Strategic planning frameworks and methodologies, and how to apply these to IT management problems, organizational roles, responsibilities and structure, and successful enterprise architecture implementation

5. Entrance requirements

This program builds on an existing understanding of the design and development processes for business software systems. Applicants who have a tertiary qualification in computer science, information technology or software engineering should also have at least three years experience as a software systems analyst and/or developer, and/or experience in a lead role architecting and implementing major IT systems for business. Other applicants should have at least five years experience as a software systems analyst, designer, architect, and/or project manager. All applicants will be interviewed as part of the selection process, to ascertain the relevance of their work experience.

Applicants with suitable work experience in Java programming, database design, and/or software development may be exempted from one or more foundation courses. Applicants with substantial work experience in IT management and/or software development may be exempted from one or more elective courses. Applicants who completed GC110 or MC060/MC061/MC062 specialising in Software Engineering may be exempted from the foundation and Group C electives. At most six exemptions may be granted.

There are two entry paths; each path consists of two parts: either qualification plus specific relevant experience, or some technical experience plus a significant amount of specific relevant experience.

1. Entry Path 1: Relevant tertiary qualification:
    a. Tertiary qualification in software engineering, computer science, or information technology
    b. At least three years experience in software systems design and/or development (not just programming)
2. Entry Path 2: Relevant work experience:
    a. Relevant technical experience, e.g., as a programmer
    b. At least five years experience as a software systems analyst, designer, architect, and/or project manager

6. Articulation

Entry into this program is subject to the entrance requirements outlined in the previous section. The table below shows courses and maximum credit allowed **if** a student is otherwise qualified to articulate.

Source Program	Owning school	Credit towards this program		Academic requirement for entry	Terms of entry	Date of agreement & expiry
		Courses	Time			
GC038/39	CSIT	ISYS1088		CR	12 credit points	N/a
		Ent Arch		CR	12 credit points	
		COSC1182, COSC2275, COSC2279, ISYS1081,		CR average	Maximum 24	

		ISYS1085			credit points	
MC062/60	CSIT	ISYS1088		CR	12 credit points	N/a
		Ent Arch		CR	12 credit points	
		ISYS1117, ISYS1055, COSC1295		CR average	Maximum 36 credit points	
		COSC2106, COSC2229, COSC2277		CR	Maximum 12 credit points	
		COSC1182, COSC2275, COSC2279, ISYS1081, ISYS1085		CR average	Maximum 24 credit points	
MC061/60	CSIT	ISYS1088		CR	12 credit points	N/a
		Ent Arch		CR	12 credit points	
		COSC2106, COSC2229, COSC2277		CR	Maximum 12 credit points	
		COSC1182, COSC2275, COSC2279, ISYS1081, ISYS1085		CR average	Maximum 24 credit points	

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			
GC038/39	CSIT	ISYS1088, COSC1182, COSC2275, ISYS1081, ISYS1085, Ent Arch, Ent Arch Case Studies		PA average	Guaranteed Maximum 48 credit points	N/a
MC061/060	CSIT	ISYS1088, COSC1168, COSC1182, COSC2275, COSC2279, ISYS1081, ISYS1085, Ent Arch, Ent Arch Case Studies; COSC2106, COSC2229, COSC2277		CR average	Guaranteed Maximum 72 credit points	N/a

7. Length of program for FT and PT students

M Tech: 144 credit points, completed over 3 semesters full-time or 6 semesters part-time.

G Dip: 96 credit points, completed over 2 semesters full-time or 4 semesters part-time.

8. Program Progression Rules

- You may attempt Group B electives at any time.
- You must complete INTE1030 IT Strategy before attempting IT Gov & Change Mgmt, or attempt it concurrently.
- You must complete COSC1295 before attempting COSC2229 or COSC2277.
- You must complete ISYS1055 and COSC1295 before attempting COSC2106 or INTE1070.
- You should complete a Group A elective before attempting ISYS1088 or any Group C elective.
- You must complete ISYS1117 and COSC1295 before attempting ISYS1088 or any Group C elective.

- You must complete ISYS1088 before attempting Ent Arch, or attempt it concurrently.
- You must complete Ent Arch before attempting Ent Arch Case Studies
- You must complete IT Gov & Change Mgmt before attempting Ent Arch Case Studies, or attempt it concurrently.

9. Teaching and learning methods

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 knowledge[2].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. Some project work lets you draw on your external experience by including field research such as questionnaires or interviews of staff in your organization.

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 group of about 5 students, to ensure there is real scope for genuinely interactive discussions. Most courses use carefully constructed case studies to illustrate key concepts and to help you develop your understanding. The case studies usually describe a particular technical or business problem and are often based on the personal research of the teaching staff, giving you the opportunity to see how the frontiers of ICT and business theory are being pushed ever outward. Often, you will be expected to perform literature reviews of, for example, relevant standards, ethical considerations, and applicable research.

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.

Specific to this program:

An enterprise architecture is a real-world, open problem. As an enterprise architect, you will be called upon to evaluate new cross-discipline situations, devise complex, creative solutions, and determine and implement the most appropriate solution. You must be able to go beyond the application of a fixed “toolset” to familiar, well-defined problems. Some courses in this program involve seminar-style discussions, 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. Many assignments require you to design or evaluate solutions for problems with complex or conflicting requirements, or to compare alternative solutions for such problems.

Learning activities in the four key courses are group-based, to reflect industry practice and to develop essential general graduate capabilities such as communication skills, teamwork and leadership. Tutorial exercises allow you to explore team dynamics, diagnostics, and management issues. Industry-based case studies are used extensively, to develop your ability

[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.

to reflect on and analyse issues in the context of realistic scenarios. Most of these discussions are led by current industry practitioners and leaders.

Some courses are delivered in “burst-mode”, i.e., a small number of classroom sessions clustered into 4-5 short periods, combined with major independent individual and/or group project work. The capstone Enterprise Architecture Case Studies course, where you will interact with practising enterprise architects and senior industry management while working in teams, bringing together your acquired abilities and skills to develop solutions to realistic problems, will be delivered in burst mode, to facilitate the participation of industry professionals as lecturers and examiners.

10. 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. The capstone Enterprise Architecture Case Studies course involves 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:

- Foundation courses focus on key concepts and initial capability attainment: 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.
- Key courses assess you specifically on enterprise architecture knowledge and capabilities via case studies analyses and a capstone group project to bring it all together. Most assessment activities are group-based (to reflect industry practice and to develop essential

general graduate capabilities such as communication skills, teamwork and leadership) with key industry-focussed projects/topics/capabilities and actual industry involvement in your assessment. Group presentations to classmates and teaching staff of outcomes from assessment activities, and to an industry panel of your major group project, allow you to demonstrate your mastery of the diverse cross-disciplinary concepts and skills by fielding questions "on your feet".

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 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).

11. Research, scholarship

Within the school there are several existing research projects that are directly relevant to this program. These include:

- A joint project with IBM examining how enterprise architects use such architecture development methods
- Research into the personal capabilities and experience that distinguish better architects from less capable architects

In addition RMIT is formally represented by a staff member of CSIT on the Standards Australia committee ICT-030 – ICT Governance and Management, which has drafted and submitted for balloting the Australian Standard AS 8016 "DR04198 Corporate governance of information and communication technology". This standard is directly relevant to enterprise architecture. Our growing research impetus in this developing field will allow us to become leaders in the area.

Integration of research into this program:

Part of Systems Architecture has been restructured as a result of research into the teaching of systems architecture.

Some specialist material in Enterprise Architecture Case Studies has been included and/or its importance increased, as a result of ongoing research into the capabilities of good architects.

Some lectures in key courses and some Group C electives are reserved for communication of ongoing research results.

12. 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 Rational Rose, is already licensed and installed.

13. Industry links

Members of the CSIT Industry Advisory Committee have been actively involved in the design of this program, especially those on the M Tech (Ent Arch) subcommittee: the chair of this subcommittee will be on the Program Accreditation Committee. Several IAC members have volunteered to participate in the EA Case Studies course, where ICT industry practitioners will present case studies for analysis, and will assess the major project presentations. Some of the BIT electives involve presentations by senior ICT professionals. One of the CSIT academics on the Program Development Team is also an ICT industry consultant, whose work includes high-level consulting directly related to enterprise architecture.

14. Support for students' success

A program coordinator will manage the day-to-day running of the program with administrative support from the School of CSIT, and will report to the Postgraduate Program Leader, who is a member of the School's Teaching Committee, Executive Committee, and the Industry Advisory Committee.

A student performance committee (SPC) will be scheduled as appropriate to involve all staff teaching into the program. In addition, a program review meeting involving all staff teaching into the program will take place once a year to support collaborative planning and quality improvement.

All postgraduate students in the school have 24-hour access to the school's computer labs and common room. Your school Unix account will give you access to school and course newsgroups. Additional events will be organized for students in this program, to provide you with further opportunities for professional networking with your classmates and industry practitioners.

15. Program evaluation and feedback

A staff-student consultative committee (SSCC) will be established and meet three times during each semester to receive comments and feedback from students. Responses and actions will be recorded in the SSCC minutes, which will be available from the School Web site.

16. Student expenses and charges

None, apart from standard course fees and university charges.

17. Program Transition Plan

N/a.

18. Course Descriptions

Existing courses with URLs of SIM Student Course Guides:

Course ID and Title	Course Coordinator	URL
Foundation Courses		
ISYS1117 Software Engineering Analysis and Design	Elizabeth Haywood	http://www.rmit.edu.au/browse;ID=ISYS1117
ISYS1055 Introduction to Database Systems	Xiuzhen Jenny Zhang	http://www.rmit.edu.au/browse;ID= ISYS1055
COSC1295 Java for Programmers	Hongyu Zhang	http://www.rmit.edu.au/browse;ID= COSC1295
INTE1030 Information Technology Strategy	Barry McIntyre	http://www.rmit.edu.au/browse;ID= INTE1030
Group A Elective Courses		
COSC2106 Document	Michael	http://www.rmit.edu.au/browse;ID= COSC2106

Course ID and Title	Course Coordinator	URL
Markup Languages	Harris	
COSC2229 Electronic Commerce and Enterprise Systems	Caspar Ryan	http://www.rmit.edu.au/browse;ID= COSC2229
COSC2277 Web Development Technologies	Simon Wilkinson	http://www.rmit.edu.au/browse;ID= COSC2277
INTE1070 Secure Electronic Commerce	Saied Tahaghoghi	http://www.rmit.edu.au/browse;ID= INTE1070
Group B Elective Courses		
BUSM2112 Business Background	Paul Cerotti	http://www.rmit.edu.au/browse;ID= BUSM2112
INTE1014 Information Technology Industry	Peter Viola	http://www.rmit.edu.au/browse;ID= INTE1014
ISYS1033 Introduction to Information Technology Project Management	Ian Searle	http://www.rmit.edu.au/browse;ID= ISYS1033
INTE1214 e-Business Models and Trends	Mohini Singh	http://www.rmit.edu.au/browse;ID= INTE1214
Group C Elective Courses		
COSC1168 Internet and Intranet Document Engineering	James Thom	http://www.rmit.edu.au/browse;ID= COSC1168
COSC1182 Usability Engineering	Audrey Tam	http://www.rmit.edu.au/browse;ID= COSC1182
COSC2275 Software Requirements Engineering	Elizabeth Haywood	http://www.rmit.edu.au/browse;ID= COSC2275
COSC2279 Web Services	Audrey Tam	http://www.rmit.edu.au/browse;ID= COSC2279
ISYS1081 Software Reuse	Hongyu Zhang	http://www.rmit.edu.au/browse;ID= ISYS1081
ISYS1085 Software Testing	Ivan Sun	http://www.rmit.edu.au/browse;ID= ISYS1085
Existing Key Course		
ISYS1088 Software Architecture	Keith Frampton	http://www.rmit.edu.au/browse;ID= ISYS1088

19. Student Feedback at RMIT

RMIT University welcomes feedback from our students.

Your feedback gives the University an opportunity to improve the quality of our teaching and learning as well as your overall University experience.

Student feedback is sought about various issues including:

- Program and University services through the Student Experience Survey. This survey is administered during first semester and involves a sample of students from each program.

- Individual courses you undertake through Course Experience Surveys. Course surveys are administered throughout the year.

- How satisfied graduates are with particular aspects of their program through the Graduate Destination Survey for Higher Education graduates and the Students Outcomes Survey for TAFE graduates.

In addition, you may be invited by academic staff to participate in focus groups where your opinions on particular topics may be sought. Furthermore, some RMIT service areas such as the Library and Marketing and Public Affairs, on occasion request feedback to improve service and resource provision.

RMIT also encourages student representation on a variety of committees and working parties including Staff Student Consultative Committee and other University committees.

20. Student Progress

Student Progress refers to the satisfactory completion of courses that you may move through a program and complete in the normal duration. If your progress is poor then you may be excluded from your program.

The Program Progression Rules (item 8) explain the prerequisites and co-requisites that govern successful progress through the program. The program structure indicates the courses that you must successfully complete to be eligible for the award.

In addition the University has a set of criteria that are used to determine when you are "At Risk" of exclusion. You will be considered to be "At Risk" if you:

1. fail a course for the second time; and / or

2. fail in a given semester or equivalent teaching period 40% or more of enrolled load in that semester or equivalent teaching period; and / or

3. demonstrate progress through a program that will not allow you to complete the program within the maximum time allowed for that program.

If you are "At Risk" in one semester, you may be invited to discuss your academic progress with an academic advisor. If you have been at risk in two (or more) semesters, you may be recommended for exclusion.

For the definition of maximum time please see the maximum time policy. Academic policy and procedures covering student progress can be found at http://www.rmit.edu.au/corporate-governance

21. Special Consideration, appeals, and discipline

Special consideration in assessment may be granted when factors beyond your control have affected your academic performance in an exam or assignment, or during the semester. Reasons for applying for special consideration might be illness, bereavement, or family or work

commitments. Students with ongoing disabilities need to apply for special consideration through the Disability Liaison Unit.

The types of special consideration that are available include: deferred assessment where you have been prevented from meeting an assessment deadline or attending an examination, and grading consideration where you have met an assessment deadline or sat an examination but have performed poorly as a result of adverse circumstances.

Forms to support your special consideration application are available from your School Student Administration Office and must be lodged at your School, together with supporting evidence (e.g. medical certificate) prior to, or within 48 hours of the scheduled time of examination. If you wish to seek advice about obtaining special consideration, or appeal against an examination result, speak first to your program coordinator or a lecturer. If you are unhappy about the outcome of your discussion, please contact Counselling Services or a student rights officer. Note: Misreading the official examination timetable will not entitle you to special consideration in assessment so be careful when checking your exam dates, times and locations.

Appeals. Students have a right to appeal against:

- assessment procedures and results – You may appeal to the University against your final result on the grounds that you were adversely affected by matters such as discrimination, incorrect assessment, faulty administration of assessment, inadequate allowance for special consideration, etc. You have four weeks from the date of publication of official results to consult with the relevant academic staff member and if the matter is still unresolved, to lodge an appeal against assessment with the relevant Academic Portfolio office. If you need assistance with appeals, you can contact a Student Rights Officer.

- the outcome of RPL/Credit Transfer applications – You may appeal to your Head of School if you are dissatisfied with the outcome of an application for credit transfer, exemption or studies-in-lieu. If you are still dissatisfied with the outcome and believe that the School has failed to follow University policy, you may then appeal to the Credit Appeals Committee of the University through the Office of the Academic Registrar.

- recommendation for exclusion from a program on the grounds of unsatisfactory performance - You have two weeks from the date of receipt of the written decision of the Student Progress Committee to lodge an appeal against exclusion with the relevant Academic Portfolio office. If you need assistance with appeals, you can contact a Student Rights Officer.

Discipline - Breaches of discipline include but are not limited to:

(1) General misconduct - any acts or behaviour that put at risk, or which cause harm or damage to, any other person, property, equipment and facilities; and which constitute harassment or intimidation on any grounds, including ethnicity, gender, sexual preference or religious or political belief, breaching Copyright legislation; improperly using University facilities or equipment, publishing confidential information held by the University, false representation.

(2) Academic misconduct, including plagiarism, cheating, representing another person or allowing yourself to be represented by another person in an assessment session, breaches of examination rules,

Depending on the nature and seriousness of the misconduct, a charge of misconduct may be heard by a senior officer of the University, by the Pro Vice-Chancellor (Students) or the Discipline Board of the University.

You have a right to appeal against the decisions of the misconduct hearing if you believe there was a personal bias or ill will at the hearing; or a denial of natural justice; or there is new evidence that was not available at the time of the hearing and which is inconsistent with the decision appealed against; or the penalty was excessive or inappropriate.

Refer to Statute 6.1 and Regulation 6.1.1 - Student Discipline which can be found on the University policy website http://www.rmit.edu.au/corporate-governance for further information.

22 Academic Integrity

Academic Integrity is about honest presentation of your academic work. It means acknowledging the work of others while developing your own insights, knowledge and ideas. Academic work in a university depends on the practice of Academic Integrity as a core value. It is an important part of academic life for both staff and students, and essential to academic thought and practice.

All work produced must acknowledge the sources of ideas presented and cite the original written work which informed it. You can achieve Academic Integrity by honestly submitting work that is your own. Presenting work that fails to acknowledge other people's work within yours can compromise Academic Integrity. This includes:

- Plagiarism;
- Cheating in an exam;
- Copying or submitting whole or parts of computer files as if they are your own (eg web pages).

There are numerous resources available at RMIT to help you develop the required skills and maintain a high level of academic integrity. These include:

- The Academic Integrity website http://www.rmit.edu.au/browse;ID=d20iqe2gwsfjz;STATUS=A?QRY=ACADEMIC%20INTEGRITY&STYPE=ENTIRE
- The Learning Skills Unit website provides a set of activities to help you cite and quote your sources correctly, and avoid plagiarism. http://aps.eu.rmit.edu.au/lsu/resources/projects/plagiarism/index.html
- RMIT101-Plagiarism – The Basics. This site contains an explanation of plagiarism and some animated examples of correct referencing. http://www.rmit.edu.au/rmit101/basics

- RMIT University Library Info-trek Tutorial Guides on citation and referencing as well as on copyright and plagiarism. http://www.rmit.edu.au/browse/Our%20Organisation%2FRMIT%20University%20Library%2FInfo-trek%2Ftutorial%2FC.%20Presenting/

23. Student Progress Committee (SPC)

Student Progress Committees (SPC's) review the academic progress of students, review borderline grades and consider students for conceded passes. The committees may also assess applications for special consideration. An SPC may be based at program or school level. SPC's meet in the week immediately before results are released although they may meet at other times. You can access your results via the RMIT website after the results release date (published in the Academic Year Calendar).

Student Progress Committees can make recommendations on all matters concerning your academic performance including your exclusion from your program. You will be notified of any decision that affects you. The University has a standard set of criteria for determining when students are 'At Risk' of exclusion. These criteria are listed under item No. 20 Student Progress (above).

24. Assessment Grades

The gradings available at RMIT for Higher Education courses are as follows:

Grade	Key Code	Mark Range
High Distinction	HD H	80 to 100
Distinction	DI D	70 to 79
Credit	CR C	60 to 69
Pass	PA P	50 to 59
Fail	NN N	0 to 49
Fail-Did Not Sit	DNS N	0

25. Classification of award

At the discretion of individual Portfolios, 'Pass with Distinction' may be awarded in both bachelor degree programs of three years full-time or equivalent part-time duration and graduate diploma courses.

All Portfolios with bachelor degree programs of four years or longer full-time or equivalent part-time duration must offer the degree with honours.

Honours awards are classified as:

* Honours First Class 1

* Honours 2A

* Honours 2B

Graduate Certificate and Masters by coursework programs may not be granted 'With Distinction' or 'Honours'.

Each Portfolio is responsible for establishing the criteria by which 'Pass with Distinction' or Honours will be calculated: this information is available from the individual Portfolio office.

Academic policy and procedures covering the Classification of Awards can be found at http://www.rmit.edu.au/corporate-governance