Studying MIT@Macquarie

A/Prof Manolya Kavakli
Director of Postgraduate Program
Department of Computing,
Feb 2017
The Department in numbers

- Created in 1981
- One of 10 Departments in the Faculty of Science and Engineering
- Close to 30 Academics
- 10 Research Fellows
- More than 40 PhD students
- 20 plus Master of Research students
Undergraduate Offering

- Bachelor of Information Technology
- Bachelor of Information Technology – Games Design and Development
- Bachelor of Digital Business
A/Prof Manolya Kavakli (manolya.kavakli@mq.edu.au) is the Director of Postgraduate Program. She is in charge of Masters by Coursework studies. A/Prof Mark Dras (mark.dras@mq.edu.au) is the Director of Masters by Research. You may contact them by sending an email to arrange an appointment to discuss the details of any program.

The coursework Master of InfoTech (MIT) website: (http://courses.mq.edu.au/postgraduate/master/master-of-information-technology)
The information page notes that the entry requirement there is a GPA of 4.75 out of 7.00.

The research masters (MRes) website: (http://www.mq.edu.au/research/phd-and-research-degrees/research-training/mres-general-faqs) It requires a Credit (GPA 3.0) average in the final year of study.
Reasons to study MIT

1. The man known as the **Father of Information Theory**, Claude Shannon, **invented the digital circuit** – the foundation of the magic that provides us all access to the Internet today - **during his master’s degree** program, when he was just **21 years old**.

2. The average **21 year old** has spent **5,000 hours (~2 years) playing video games**, sent 250,000 emails and text messages, and has spent 10,000 hours on a mobile phone alone.

3. About 1.8 billion people connect to the Internet, **450 million (quarter) speak English**.

4. **Google** handles an estimated **1 billion search queries** each and every day, releasing almost 200 tons of CO2 per day.

5. **Facebook** reports over 1 billion registered users. Were it a country, it would have had **3rd largest population in the World**.

6. On **eBay**, there is an average of **$680 worth** of transactions every second.

7. There are **500 apps** added each day to the **Windows Phone Store**.

8. Of the **60 billion emails** that are sent on a daily basis, **97% are considered spam**.

9. A program named “Rother J” was the first computer virus to come into sight “in the wild” — that is, outside the single computer or lab where it was created. **70% of virus writers** actually work under a contract for an organization.

10. **Hewlett Packard, Microsoft**, as well as **Apple** have one not so obvious thing in common – they were all **started in a garage**.
Scholarships

- The Department is not offering any scholarship to Postgraduate coursework students. There may be limited number of scholarships for MRes + PhD students who are primarily interested in research. However, GPA expected by scholarship students is generally above 3.5/4. For scholarship offered by the university to international students, please see the information at here:
  - [https://www.mq.edu.au/study/international-students/scholarships](https://www.mq.edu.au/study/international-students/scholarships)
# MIT Enrolments

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## Student demographics in MIT in Sep 2016

With the new MIT program (MINFOTECH) we see a change in the student demographics shifting from Domestic (DOM) to International (INT) students.

Female students in MIT are increasing!

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</table>

In s1 2016: %29.7
MIT@Macquarie

**In 2016:** 83 students (55 INT + 28 DOM) 66% INT + 34% DOM
68 MINFOTECH + 15 MIT

**In 2015:** 62 students (27 INT + 35 DOM) 44% INT + 56% DOM
16 MINFOTECH (12 INT + 4 DOM) 75% INT + 25% DOM
45 MIT
1 MITCONS

Avg GPA in 2015 = 3.18/4

Specialisations:

<table>
<thead>
<tr>
<th>Programme</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAN</td>
<td>43</td>
</tr>
<tr>
<td>ICS</td>
<td>24</td>
</tr>
<tr>
<td>WE</td>
<td>6</td>
</tr>
<tr>
<td>IS</td>
<td>8</td>
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</tbody>
</table>

**In 2015:**
77% P/TIME, 53 p/time (26 enrolled in 2 units + 27 in 1 unit)
23% F/TIME, 16 f/time (9 enrolled in 4 units + 7 in 3 units)

**New Enrolments:**
In Master of IT, we had 52 international enrolments in 2016, compared to 32 in 2015. A rise of 62.5% is a strong result.

Looking ahead we have 35 students who have already accepted offers for 2017 commencements, and that compares to 14 acceptances at the same time last year.

On current projections we can expect further strong growth over the course of this year.
2016 MIT Profile

MIT (1 year Masters): 29 students enrolled, only 3 students are International, all others are domestic and part time.
3/29 international

MINfoTech (2 year Masters): 36 students, only 4 students are domestic, all are international.
4/36 international

In total, we have 65 students (35 INT + 30 DOM). 54% INT + 46% DOM
29 MIT (3 INT + 26 DOM) 10% INT + 90% DOM
36 MINfotech (32 INT + 4 DOM) 89% INT + 11% DOM

Specialisations:

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<thead>
<tr>
<th></th>
<th>MIT INT</th>
<th>MIT DOM</th>
<th>MINfotech INT</th>
<th>MINfotech DOM</th>
<th>TOTAL INT</th>
<th>TOTAL DOM</th>
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<tr>
<td>ICS</td>
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<td>9</td>
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<td>13</td>
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<tr>
<td>IS</td>
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<td>2</td>
<td>1</td>
<td>19</td>
<td>3</td>
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<tr>
<td>WE</td>
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</table>
The strategic research goals of Macquarie University’s Computing Department are to apply computational methods to solve real problems in the creation of computer-based technology. Our researchers collaborate with local and international partners in projects that are aligned with the following interests and themes.

**Cyber security**
Achieving fundamental advances in security techniques that enable secure and trustworthy systems and services.

We conduct research projects on network, cloud computing security, trusted computing, software systems security, large-scale data security, mobile and wireless security, Internet of Things (IoT) security, formal security models and cryptography.

**Data science**
Developing methods for extracting, manipulating and analysing information from various kinds of data sets.

Current interests include research in machine learning techniques and data mining over natural language text and speech. Example of applications range from finance to the medical domain.

**Virtual Reality**
Focusing on the interaction between human beings and computer technology, by taking a human-centered approach.

Thanks to a cutting edge and dedicated facility on Campus, the Simulation Hub, we investigate the design and development of pervasive interfaces, motion tracking, training simulations, collaborative and immersive environments, and the design and evaluation of video games.
Cyber Science and Technology

Cyber 2020 Vision

DSTO cyber science and technology plan

DSTO cyber science and technology capabilities

DSTO has over 30 years of achievement in cyber research, much of which is classified. It has a strong track record in providing science and technology support, testing technical advice and providing solutions across a broad spectrum of cyber technologies and applications to Defence, the Australian Intelligence Community and national security agencies. Typical examples where DSTO research has had impact are:

- **Cryptography**: Application of advanced cryptographic methods to provide secure intelligence capability in support of intelligence operations.
- **Digital Forensics**: Cross-correlation of multi-source data to support intelligence operations.
- **Computer Network Defence**: Development of novel computer network defence technologies and transitioning of the technology into operational use.
- **Network Analysis and Management**: Widespread operational use of DSTO-developed graph and statistical based network analysis and change detection tools.
- **Multi-level Security**: The Starlight data diode is an example of successful commercialisation of DSTO technology. In this instance, by Tenm Datacapture. Starlight allows users to access classified and unclassified networks, without compromising security, and has been accredited to Evaluation Assurance Level 5 by the National Information Assurance Partnership (NIAP).

DSTO has a large multi-disciplinary team working in cyber-related R&D encompassing mathematicians, computer scientists, software, hardware and communications engineers, physicists, digital processors, psychologists and social scientists, most of whom are located at DSTO Edinburgh.

Additionally, DSTO is able to leverage all of its multi-disciplinary expertise across the Organisation to develop integrated technology solutions to difficult cyber problems. This includes areas outside of "core" cyber R&D, such as command and control research, modeling and simulation, scientific and technical intelligence (STI) and operations research and systems analysis (ORS) which assess technology solutions within the context of the capability (in preparation they will provide).

DSTO has made significant long-term investment to support its cyber R&D and has a range of specialist facilities at DSTO Edinburgh including: advanced computing capabilities, high performance computing, signal processing, network analysis, radio frequency, and electronic components, experimental communications infrastructure, modeling and simulation capabilities, privacy and cyber security, and secure facilities.
Postgraduate Offering

- Master of Information Technology

Provides the opportunity to students to strengthen their understanding of underlying principles by applying them to **practical, industry-focused** problems.

Units have been developed in **partnership and consultation with industry**.

The knowledge and skill students gain in the coursework units is consolidated through a **capstone project in a leading-edge topic**.
Strong links with Industry

- In the heart of Sydney’s IT Hub
- Industry Advisory Board
- Research links with Google, Microsoft, etc
- Adjunct and guest lecturers working in the industry
- Internships
Australian Industry

If Australia were 100 businesses...
61 are micro businesses (0-4 employees)
30 are small businesses (5-19 employees)
8 are medium businesses (20-199 employees)
1 is large (200+ employees)

INTERNET ACCESS
92 businesses had internet access
99 had broadband
1 had dial up
45 had a web presence
55 placed orders via the internet
28 received orders via the internet

There were approximately **12.8 million internet subscribers** in Australia at the end of June 2015.
This is an increase of 2% from the end of June 2014.

INNOVATION
41 businesses introduced innovation
7 businesses abandoned innovation
25 businesses still had innovation in development
The Government’s *Industry Innovation and Competitiveness Agenda*

- *5 sectors that Australia has recognised competitive strength:*
  1. Food & Agribusiness,
  2. Mining Equipment,
  3. Technology & Services,
  4. Oil, Gas & Energy Resources,
  5. Advanced Manufacturing and Medical Technologies & Pharmaceuticals.

Comprising over **300,000 firms**, these sectors account for about a sixth of industry output, over a quarter of export value and nearly **40% of business research and development expenditure**.
Postgraduate Offering

Pathway to Master of Research

After completion of the first year, MIT students may transfer to the second year of the Master of Research (MRes)

Handbook: Master of IT
Keep your options open

students can

- Find a job in the industry
- Enrol in a Master of IT
- Enrol in a Master of Research and then possibly into a PhD
Postgraduate Offering

- Master of Information Technology

Coursework Masters

**Entry:** In Session 1 (end of Feb) or in Session 2 (end of July)

**Credit points required:** 64cp corresponding to 16 units

**Typical full time load:** Four subjects per Session over two years

Must complete one of the following Specialisations:
- Management
- Internetworking and Cyber Security
Postgraduate Offering

Admission Requirements

• Australian level 7 bachelor's qualification or recognised equivalent and two units or equivalent in information technology
• GPA of 4.75 (out of 7.00)

OR

• Work experience of at least 3 years (full time) duration in a relevant IT area.
Exemptions and Recognition for Prior Learning

Students with an IT qualification and/or work experience can receive from up to 32cp worth of exemptions.

This represents up to 12 months off.

Students with a Bachelor in IT (or related area) typically receives 16cp of Exemption, i.e. can complete their program in 18 months.
Postgraduate Offering

• Specialisation in Management

 Prepares IT professionals and managers for management roles in IT related aspects of business.

 Develops an appreciation of the technical aspects and challenges of modern IT systems for the provision of high quality IT services in enterprise and business settings.

 Trains students to plan for the development of major projects and enterprise systems and improve business processes, while gaining skills essential for a management role in the IT sector.
**Postgraduate Offering**

- Specialisation in Management

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<thead>
<tr>
<th>Status</th>
<th>Selection</th>
<th>Unit code</th>
<th>Unit name</th>
<th>Credit points</th>
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</thead>
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<tr>
<td>600 level</td>
<td>Required</td>
<td>ITEC600</td>
<td>IT and the Future of Society</td>
<td>4</td>
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<tr>
<td></td>
<td></td>
<td>ITEC601</td>
<td>Enterprise Systems Integration</td>
<td>4</td>
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<tr>
<td></td>
<td></td>
<td>ITEC602</td>
<td>Management of IT Systems and Projects</td>
<td>4</td>
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<tr>
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<td>ITEC654</td>
<td>Applications, Modelling and Development</td>
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<td>ITEC699</td>
<td>Foundation Topic in Computing</td>
<td>4</td>
</tr>
<tr>
<td>800 level or above</td>
<td>Required</td>
<td>ITEC832</td>
<td>Enterprise Application Integration</td>
<td>4</td>
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<tr>
<td></td>
<td></td>
<td>ITEC841</td>
<td>Information Systems Project and Risk Management</td>
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<td>ITEC842</td>
<td>Enterprise Management</td>
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<td>ITEC844</td>
<td>Strategic Project Management</td>
<td>4</td>
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<td></td>
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<td>ITEC854</td>
<td>Security Management</td>
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<tr>
<td></td>
<td></td>
<td>ITEC871</td>
<td>Information Systems Design and Management</td>
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</tbody>
</table>

**Total credit points required to satisfy this program**: 40
Postgraduate Offering

• **Specialisation in Internetworking and Cyber Security**

Prepares IT professionals to meet the security challenges created by emerging technologies and related processes and practices.

Develops the necessary skills to protect the public and private infrastructure including networks, computers, and software from cyber attacks and threats.

 Prepares students to control the complex environment that is the cyberspace.
### Postgraduate Offering

- **Specialisation in Internetworking and Cyber Security**

Requirements for a specialisation: Completion of 40 credit points as outlined below.

**INTERNETWORKING AND CYBER SECURITY**

<table>
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<tr>
<th>Status</th>
<th>Selection</th>
<th>Unit code</th>
<th>Unit name</th>
<th>Credit points</th>
</tr>
</thead>
<tbody>
<tr>
<td>600 level</td>
<td>Required 16 credit points from</td>
<td>ITEC643</td>
<td>Cryptography and Information Security</td>
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<td></td>
<td></td>
<td>ITEC647</td>
<td>Data Communication</td>
<td>4</td>
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<td></td>
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<td>ITEC649</td>
<td>Web Technology</td>
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<td></td>
<td></td>
<td>ITEC697</td>
<td>Computer Networks</td>
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<td>ITEC699</td>
<td>Foundation Topic in Computing</td>
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<tr>
<td>800 level or above</td>
<td>Required</td>
<td>ITEC801</td>
<td>Distributed Systems</td>
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<td></td>
<td>Required</td>
<td>ITEC803</td>
<td>Advanced Topics in Computer Networks</td>
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<td>Required</td>
<td>ITEC850</td>
<td>Network System Design</td>
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<td>Required</td>
<td>ITEC851</td>
<td>Mobile Data Networks</td>
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<td>ITEC852</td>
<td>Advanced System and Network Security</td>
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<tr>
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<td>Required</td>
<td>ITEC855</td>
<td>Security Technologies and Forensic Analysis</td>
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</table>

**Total credit points required to satisfy this program**: 40
SPECIAL UNITS

ITEC812, ITEC810, ITEC897 and ITEC898 are special units. You need to study these units at the end of the study after completing at least 16cp 800-level required units for your specialization. ITEC810, ITEC898, and ITEC897 are capstone units. You have to do either itec810, or one of the internship units to be able to graduate.

itec897 is a full-time 16cp internship unit and itec898 is part-time 8cp internship unit. You need to have a GPA above ¾ to enroll in internship units such as itec897 (full-time 16cp) and itec898 (part-time 8cp).

If you wish to do internship, you need to make a strategic plan in the beginning of your study and reserve room for doing the internship, instead of elective units. Otherwise, there may be financial implications of these units on your enrolment.

You can find your own location for internship or we can place you into a company. However, you need to send your CV and transcripts to A/Prof Manolya Kavakli a few months before the enrolment, if you wish to do the internship units. You cannot enrol in these units until we find a place for you. In this case, you need to complete itec810 to be able to graduate.
Master of Information Technology requirements: Minimum number of credit points required for this degree is 64. Including 16 credit points at 600 level, 48 credit points at 800 level or above; completion of a qualifying specialisation; completion of other specific minimum requirements as set out below. Bachelor graduates in Information Technology or related discipline are exempted from completing these 16 credit points at 600 level as Recognition for Prior Learning.

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<tr>
<th>Status</th>
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<th>Unit code</th>
<th>Unit name</th>
<th>Credit points</th>
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<tr>
<td>800 level or above</td>
<td>Required</td>
<td>ITEC812</td>
<td>Special Topic in Information Technology</td>
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<td>Required 4 credit points from</td>
<td>ITEC units at 800 level</td>
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<td>Required 16 credit points from</td>
<td>ITEC897</td>
<td>Industry Based Internship 1 (6cp)</td>
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<td></td>
<td>or 16 credit points from</td>
<td>ITEC898</td>
<td>Industry Based Internship 2 (8cp) and 6cp from the below units:</td>
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<tr>
<td></td>
<td>or 16 credit points from</td>
<td>ITEC890</td>
<td>Information Technology Project (4cp) and 4cp from the below units:</td>
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<td>Choose from these below units, each worth 4 credit points:</td>
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<td>ACCG922</td>
<td>Accounting Information Systems</td>
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<td>BUS800</td>
<td>Electronic Commerce Strategy</td>
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<td>EDI982</td>
<td>Content Management for Print and Online Delivery</td>
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<td>ENWS808</td>
<td>Introduction to Geographic Information Science for Postgraduates</td>
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<td>ENWS853</td>
<td>Environmental Applications of GIS and Remote Sensing</td>
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<td>Interactive Communication</td>
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<td>MKTG804</td>
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<td>PIC808</td>
<td>Cyber Terrorism and Information Warfare</td>
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<td>PIC840</td>
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<td>PIC848</td>
<td>Cyber Security</td>
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<td>STA828</td>
<td>Data Mining</td>
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<td></td>
<td>STA878</td>
<td>Modern Computational Statistical Methods</td>
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<tr>
<td>Qualifying specialisation</td>
<td>Required 1 qualifying specialisation (these can be found overleaf)</td>
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<td>40</td>
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<tr>
<td>Total credit points required to satisfy this program</td>
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# Master of Information Technology

**Double major in Internetworking and Cyber Security & Management**

**PROGRAM OF STUDY 2017**

Master of Information Technology with a double major in Internetworking and Cyber Security & Management requirements:

Minimum number of credit points required for this degree is 72. Including 16 credit points at 600 level, 56 credit points at 800 level or above; completion of a qualifying specialisation; completion of other specific minimum requirements as set out below. Bachelor graduates in Information Technology or related discipline are exempted from completing those 16 credit points at 500 level as Recognition for Prior Learning.

<table>
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<td>ITEC600</td>
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<td>Cryptography and Information security</td>
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<td>ITEC606</td>
<td>ITEC606</td>
<td>Applications, Modelling and Development</td>
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<td>ITEC607</td>
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<td>Computer Networks</td>
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<td>ITEC608</td>
<td>ITEC608</td>
<td>Foundation Topics in Computing</td>
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<td>800 level or above</td>
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<td>Special Topic in Information Technology</td>
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<td>ITEC801</td>
<td>Information Technology Project</td>
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<td>ITEC802</td>
<td>ITEC802</td>
<td>Distributed Systems</td>
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<td>ITEC803</td>
<td>ITEC803</td>
<td>Advanced Topics in Computer Networks</td>
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<td>ITEC804</td>
<td>Enterprise Application Integration</td>
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<td>ITEC805</td>
<td>ITEC805</td>
<td>Information Systems Project and Risk Management</td>
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<td>ITEC806</td>
<td>ITEC806</td>
<td>Enterprise Management</td>
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<td>ITEC807</td>
<td>ITEC807</td>
<td>Strategic Project Management</td>
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<td>ITEC808</td>
<td>ITEC808</td>
<td>Network System Design</td>
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<td></td>
<td>ITEC809</td>
<td>ITEC809</td>
<td>Mobile Data Networks</td>
<td>4</td>
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<tr>
<td></td>
<td>ITEC810</td>
<td>ITEC810</td>
<td>Advanced System and Network Security</td>
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<tr>
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<td>ITEC811</td>
<td>ITEC811</td>
<td>Security Technologies and Forensic Analysis</td>
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<td>ITEC812</td>
<td>ITEC812</td>
<td>Security Management</td>
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<tr>
<td></td>
<td>ITEC813</td>
<td>ITEC813</td>
<td>Information Systems Design and Management</td>
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</tbody>
</table>

**Total credit points required to satisfy this program:** 72
PG students can request to change their specialisation online at:
http://www.students.mq.edu.au/student_admin/manage_your_study_program/course_changes/change_of_major/?

Under ‘How to Apply’, there is a link for students to login to the online form via Ask@MQ. They can request to change their specialisation here.
Face to face activities

- Lectures
- Small tutorial/practical classes

iLearn

- Dedicated learning system
- Audio recording + slides available in all units
- Interactive forum + online submission of work
Classes in the **evening** (weeknights – 6 to 9/10pm) or **Saturday** morning and afternoon

**Audio recordings and slides** available in all units

**Paid internships** available for our top students
Internships

Provide opportunities to advance professional skills with a group of partner leading technological companies, such as Domain (Fairfax Media), IT Agency, Macquarie Hospital, Brainworks, Amazon Web Services, Huawei, EY, Microsoft, Agilent Security Risk and Resilience Consultancy Company, etc.

Internships are offered part-time or full-time over a semester as an option to high achieving students who can gain 8 or 16cp toward their MIT
eStudent: Waivers

ENROLMENT:
There are two important concepts that you need to be aware of: Waivers and RPL.

WAIVERS: Due to the flexibility of our programs, you need to be aware of the fact that you must demonstrate that you have the prerequisite knowledge for each unit you want to enrol in. Please don't assume that we have access to your transcripts and courses you have studied.

eStudent lists the units you need to study to be able to graduate, however, you need to enrol in each unit that is specified in eStudent as your study plan. To be able to enrol in each unit, you must ask for waiver.

The goal of waivers is to inform the unit convenor that you have the prerequisite knowledge. You must attach the transcripts to your waiver applications.

Once you have waiver approvals, you can enrol in the units.
eStudent: RPL & RSL

RPL:
You must have pre-approved Recognition of Previous Learning (RPL) or can apply for RPL for 600 level units which are mainly second and third year computing units.
If you wish to obtain RPL, you need to apply for it and demonstrate the equivalent of these units by providing transcripts and unit outlines.
You can do this online through eStudent.

If you wish to obtain RPL, you need to apply for it and demonstrate the equivalent of these units by providing transcripts and unit outlines. You can do this online through eStudent. You can also apply for RPL (up to 8cp only) if you have obtained industrial certificates such as Cisco, ITIL, Microsoft, Oracle, etc. Each would be counted equivalent to 4cp 800 level elective unit.

REDUCED STUDY LOAD:
You are eligible to study 3 units per semester applying for Reduced Study Load.
You can do this online through eStudent.
Three units per semester are equivalent to full time study load.
Apply for every semester.
Recommended pattern of enrolment for MIT (Management) specialization 1st year:

If you have RPL for 600 units:
In 2017 s1, enrol in: itec832, itec841, itec844, elective unit if you don’t have prerequisites
In 2017 s2, enrol in: itec842, itec871, itec854, elective unit or itec812

If you don’t have RPL for 600 units:
You have to study 4 600-level units from a list of 6 (itec600, 601, 602, 654, 660, and 699). In this list itec699 is a shell unit that may replace any 600-level programming units to study. Please discuss the units to study instead of itec699 with A/Prof Manolya Kavakli, since she has to put a deeming application for each student in that case.
In 2017 s1, enrol in: itec602, itec654, itec844, itec832 or itec841 or an elective unit if you don’t have prerequisites (please note that itec832 requires itec601 and itec841 requires itec602 as a prerequisite)
In 2017 s2, enrol in: itec600, itec601, itec854, itec842 or itec871
MIT (Int. & Cybersecurity) specialization 1st year

Recommended pattern of enrolment for MIT (Internetworking & Cybersecurity) specialization 1st year:

If you have RPL for 600 units:
In 2017 s1, enrol in: itec803, itec850, itec855, elective unit
In 2017 s2, enrol in: itec801, itec851, itec852, elective unit or itec812

If you don’t have RPL for 600 units:
You have to study 4 600-level units from a list of 6 (itec643, 647, 649, 697, 692, and 699). In this list itec699 is a shell unit that may replace any 600-level programming units to study. Please discuss the units to study instead of itec699 with A/Prof Manolya Kavakli, since she has to put a deeming application for each student in that case.
In 2017 s1, enrol in: itec643, itec647, itec649, itec803 or itec850 or itec855 or itec844 if you don’t have prerequisites for the others)
In 2017 s2, enrol in: itec697, itec801, itec851, itec852
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1 ITEC800</td>
<td>Systems Engineering Process (4) no prereq</td>
<td>4</td>
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<tr>
<td>S1 ITEC803</td>
<td>Advanced Topics in Computer Networks (4) (prereq: comp647)</td>
<td>4</td>
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<td>S1 ITEC850</td>
<td>Network System Design (4) (prereq: comp647)</td>
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<tr>
<td>S1 ITEC855</td>
<td>Security Technologies and Forensic Analysis (prereq: comp647 or 643)</td>
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<td>S1 ITEC841</td>
<td>Information Systems Project and Risk Management (4)</td>
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<tr>
<td>S1 ITEC844</td>
<td>Strategic Project Management (4) (prereq: itec602 or 660)</td>
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<td>S1 ITEC832</td>
<td>Enterprise Application Integration no prereq</td>
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<td>S1 PICT 848</td>
<td>Cyber Security</td>
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<td>S1 PICT 808</td>
<td>Cyber Terrorism and Information Warfare</td>
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<tr>
<td>S1 ICOM 897</td>
<td>Interactive Communication</td>
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<tr>
<td>S1 STAT828</td>
<td>Data Mining</td>
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<tr>
<td>S1 STAT878</td>
<td>Modern Computational Statistical Methods</td>
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<tr>
<td>S1 ACCG922</td>
<td>Accounting Information Systems</td>
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<tr>
<td>S1 BUS800</td>
<td>Electronic Commerce Strategy (external)</td>
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<tr>
<td>S1 EDIT982</td>
<td>Content Management for Print and Online Delivery</td>
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<td>S1 MKTG804</td>
<td>E-Business Marketing</td>
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<td>S1 MKTG833</td>
<td>Social Media Management</td>
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<tr>
<td>S1 ENVS808</td>
<td>Introduction to Geographic Information Science for Postgraduates</td>
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</table>
For S2, the following units are in the handbook:

S2  ITEC801  Distributed Systems (4) no prereq
S2  ITEC842  Enterprise Management (4) no prereq
S2  ITEC854  Security Management (4) no prereq
S2  ITEC871  Information Systems Design and Management (4) no prereq
S2  ITEC851  Mobile Data Networks (4) (prereq: comp647)
S2  ITEC852  Advanced System and Network Security (4) (prereq: comp647)
S2  ITEC830  Web Data Technologies
S2  PICT840  Cyber Crime
S2  ACCG922  Accounting Information Systems
S2  BUS800  Electronic Commerce Strategy
S2  BUS840  Business Project Management
S2  ENVS853  Environmental Applications of GIS and Remote Sensing
We also run a number of 600 level units in s1 and s2 as follows:
S1 Cryptography and Information Security (4) ITEC643
S1 Data Communication (4) ITEC647
S1 Web Technology (4) ITEC649
S2 Computer Networks (4) ITEC697
S2 IT and the Future of Society (4) ITEC600
S2 Enterprise Systems Integration (4) ITEC601
S1 Management of IT Systems and Projects (4) ITEC602
S1 Applications, Modelling and Development (4) ITEC654

Units available for 2 or more semesters:
S1, S2, S3 (Dec 2016-Feb 2017) ITEC87 Industry Based Internship 1
S1, S2, S3 (Dec 2016-Feb 2017) ITEC898 Industry Based Internship 1
S1, S2, ITEC810 Special Topic in Information Technology
S1, S2, ITEC812 Information Technology Project

We don’t run the following units:
TBD ITEC821 Requirements Engineering (4)
TBD ITEC872 Data Mining and Business Intelligence (4)
TBD ITEC874 Big Data Technologies (4)
Recommended pattern of enrolment for MIT (Management) specialization 2nd year:
Considering you have completed all required 600-level and all required 800-level units, as well as itec812 and 1 elective unit in the last year:

In 2018 s1, enrol in:
EITHER itec810 and 3 elective units at 800-level (not necessarily from ITEC800-range)
OR itec898 and 2 elective units at 800-level (not necessarily from ITEC800-range)
OR itec897 and NO elective units at 800-level

Otherwise, make sure you complete the following:
In 2018 s1, enrol in: itec812 and any of itec832, itec841, itec844, or elective units
In 2018 s2, enrol in: itec810 or itec897 or 898 and any of itec842, itec871, itec854, or elective units
Recommended pattern of enrolment for MIT (Internetworking & Cybersecurity) specialization 2nd year:

Considering you have completed all required 600-level and all required 800-level units, as well as itec812 and 1 elective unit in the last year:

In 2018 s1, enrol in:

EITHER itec810 and 3 elective units at 800-level (not necessarily from ITEC800-range)
OR itec898 and 2 elective units at 800-level (not necessarily from ITEC800-range)
OR itec897 and NO elective units at 800-level

Otherwise, make sure you complete the following:

In 2018 s1, enrol in: itec812 and any of itec803, itec850, itec855, or elective units

In 2018 s2, enrol in: itec810 or itec897 or 898 and any of itec801, itec851, itec852, or elective units
Huawei’s Competition

As the global leader in information and communication solutions, HUAWEI provides competitive ICT solutions and services to telecom vendors, enterprises and customers to help them succeed in digital society. There is a web site regarding Huawei’s competition and I informed the MIT students about the link: https://www.huaweiacad.com/webapps/hw-toboo-BBLEARN/portal/exec.do

One of the MIT Internetworking and Cybersecurity students, Opeyemi Ajibola gained the 3rd Place at Huawei’s Networking Knowledge and Skill Competition. He is going to present us in an international competition in China, between 26-27 Feb 2017.

Opeyemi also gained a Cisco cyber security scholarship to study Cybersecurity in a 90-day class by Cisco between March-June 2017.

Opeyemi is a network engineer with seven years’ extensive experience in designing, implementing, securing, managing, supporting and monitoring IP based system. He has a bachelor’s degree in Electrical/Electronic Engineering at Ladeke Akintola University of Technology, Nigeria and has worked as a network engineer in different capacities including a FMCG and an IT consulting firm.