### ISYS90048 Managing ICT Infrastructure

<table>
<thead>
<tr>
<th>Credit Points:</th>
<th>12.5</th>
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<tbody>
<tr>
<td><strong>Level:</strong></td>
<td>9 (Graduate/Postgraduate)</td>
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<tr>
<td><strong>Dates &amp; Locations:</strong></td>
<td>2016, Parkville</td>
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<td></td>
<td>This subject commences in the following study period/s: March, Parkville - Taught on campus. Semester 2, Parkville - Taught on campus.</td>
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<td><strong>Time Commitment:</strong></td>
<td>Contact Hours: 36 hours, comprising of nine 4 hour seminars. Total Time Commitment: 200 hours</td>
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<tr>
<td><strong>Prerequisites:</strong></td>
<td>None</td>
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<td><strong>Corequisites:</strong></td>
<td>None</td>
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<td><strong>Recommended Background Knowledge:</strong></td>
<td>None</td>
</tr>
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<td><strong>Non Allowed Subjects:</strong></td>
<td>None</td>
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<td><strong>Core Participation Requirements:</strong></td>
<td>For the purposes of considering request for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005), and Students Experiencing Academic Disadvantage Policy, academic requirements for this subject are articulated in the Subject Overview, Objectives, Assessment and Generic Skills sections of this entry. It is University policy to take all reasonable steps to minimise the impact of disability upon academic study, and reasonable adjustments will be made to enhance a student's participation in the University's programs. Students who feel their disability may impact on meeting the requirements of this subject are encouraged to discuss this matter with a Faculty Student Adviser and Student Equity &amp; Disability Support: <a href="http://www.services.unimelb.edu.au/disability/">http://www.services.unimelb.edu.au/disability/</a></td>
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<tr>
<td><strong>Coordinator:</strong></td>
<td>Dr Sean Maynard</td>
</tr>
<tr>
<td><strong>Contact:</strong></td>
<td>Semester 2</td>
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<tr>
<td></td>
<td>Dr Sean Maynard</td>
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<td></td>
<td><a href="mailto:sean.maynard@unimelb.edu.au">sean.maynard@unimelb.edu.au</a> (<a href="mailto:sean.maynard@unimelb.edu.au">mailto:sean.maynard@unimelb.edu.au</a>)</td>
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### Subject Overview:

#### Aims

This subject provides students with an understanding of the current issues in the management of Information and Communication Technology (ICT) infrastructure and ICT service provision. Topics covered include the commoditisation of ICT, standardisation, need for interoperability, development of service-oriented architectures, adoption of enterprise-wide architectures and networked services (cloud computing). The alignment of ICT infrastructure management and ICT service provision with organisational business and strategic goals is a key theme of the subject. Students are expected to become familiar with current ICT governance frameworks and their implications for effective ICT infrastructure management.

#### Indicative Content

Topics covered in the subject include: current trends in IT infrastructure usage and administration, commoditisation and convergence of information technologies, impact of mobile IT and cloud computing, role of standards, need for interoperability – semantic, technological and organisational, interoperability frameworks, IT acquisition, service orientation, ICT governance frameworks, ICT management domains, development of IT enterprise architectures, and career paths for IT infrastructure managers.

### Learning Outcomes:

#### Intended Learning Outcomes (ILO’s)

On completion of this subject the student is expected to:
1 Explain current trends in ICT infrastructure and their impacts on ICT infrastructure management
2 Demonstrate an awareness of current ICT governance frameworks and their relevance to the development of ICT infrastructure management plans and proposals
3 Analyse current ICT infrastructure management plans and practice, and assess their degree of alignment with organisational business and strategic goals
4 Demonstrate an understanding of the need for the achievement of interoperability in enterprise-wide ICT infrastructures; and
5 Demonstrate an understand of the role and importance of ICT service provision and acquisition in the responsibilities of an ICT infrastructure manager

Assessment:
Analysis of an ICT infrastructure management plan – individual report (30%), due mid semester, requiring 40-45 hours of work. Intended Learning Outcomes (ILOs) 2 to 4 are addressed in the analysis report. Development of an ICT infrastructure business case – individual report (30%), due late semester, requiring 40-45 hours of work. ILOs 1, 2 and 5 are addressed in the business case report. 24-hour, limited time assignment – individual assignment, due late semester (40%). ILOs 1-5 are addressed in the assignment.

Prescribed Texts: There are no prescribed texts for this subject. A book of readings will be provided.


Breadth Options: This subject is not available as a breadth subject.

Fees Information: Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees

Generic Skills: On completion of this subject, students should have developed the following generic skills:
# Literature searching and analysis
# Critical thinking
# Case study analysis
# Independent learning
# Report writing

Links to further information: http://www.cis.unimelb.edu.au

Notes:
**Learning and Teaching Methods**
The subject is delivered in 4 hour classes, with a range of lectures, tutorial and workshop style teaching, as a whole class, individually and in small groups. Outside class students are expected to read supporting material and cases.

**Indicative Key Learning Resources**
A range of reading material, including articles and case studies will be cited and made available electronically during the course.

**Careers/Industry Links**
This subject is relevant to careers as IT managers, IT analysts, IT consultants and financial managers with an IT portfolio. The two report-based components of the assessment require the students to analyse business case studies from industry. Industry-based case studies are used throughout the subject.

**Related Course(s):**
- Doctor of Philosophy - Engineering
- Master of Information Systems
- Master of Philosophy - Engineering
- Master of Science (Information Systems)

**Related Majors/Minors/ Specialisations:**
- MIS Professional Specialisation
- MIS Research Specialisation