

# ISYS90077 EHealth Applications and Solutions

<b>Credit Points:</b>	12.5						
<b>Level:</b>	9 (Graduate/Postgraduate)						
<b>Dates &amp; Locations:</b>	2016, Parkville This subject commences in the following study period/s: Semester 1, Parkville - Taught on campus.						
<b>Time Commitment:</b>	Contact Hours: 36 hours Total Time Commitment: 200 hours						
<b>Prerequisites:</b>	May be taken concurrently: <table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>ISYS90076 IT Infrastructure for eHealth</td> <td>Semester 1</td> <td>12.50</td> </tr> </tbody> </table>	Subject	Study Period Commencement:	Credit Points:	ISYS90076 IT Infrastructure for eHealth	Semester 1	12.50
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ISYS90076 IT Infrastructure for eHealth	Semester 1	12.50					
<b>Corequisites:</b>	None						
<b>Recommended Background Knowledge:</b>	None						
<b>Non Allowed Subjects:</b>	None						
<b>Core Participation Requirements:</b>	<p>&lt;p&gt;For the purposes of considering request for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005), and Student Support and Engagement Policy, academic requirements for this subject are articulated in the Subject Overview, Learning Outcomes, Assessment and Generic Skills sections of this entry.&lt;/p&gt;         &lt;p&gt;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 and Disability Support: &lt;a href="http://services.unimelb.edu.au/disability"&gt;http://services.unimelb.edu.au/disability&lt;/a&gt;&lt;/p&gt; </p>						
<b>Coordinator:</b>	Assoc Prof Kathleen Gray						
<b>Contact:</b>	Dr Kathleen Gray Email: <a href="mailto:kgray@unimelb.edu.au">kgray@unimelb.edu.au</a> (mailto:kgray@unimelb.edu.au)						
<b>Subject Overview:</b>	<p><b>Aims</b> This subject provides an overview of design, implementation and evaluation considerations for developers of major eHealth solutions and applications, including electronic health records (EHR), telehealth, clinical decision support systems (CDSS), consumer health and innovative tools for biomedical research.</p> <p><b>Indicative Content</b> Five major topics will be covered in lectures, tutorials and hands-on computer laboratories:</p> <ol style="list-style-type: none"> <li>1 Electronic Health Records Solutions</li> <li>2 Telemedicine and Telehealth Systems</li> <li>3 Clinical Decision Support Systems</li> <li>4 Consumer Health Applications</li> <li>5 Clinical and Translational Research Innovations</li> </ol>						
<b>Learning Outcomes:</b>	<p><b>Intended Learning Outcomes (ILOs)</b> On completion of this subject the student is expected to:</p> <ol style="list-style-type: none"> <li>1 Prepare a technical review of current solutions in eHealth</li> <li>2 Recognise opportunities for improvement through the development of eHealth solutions</li> <li>3 Design an eHealth solution based on critical evaluation of tools and methods</li> </ol>						

	4 Make a case for the feasibility, innovation, impact and value of the envisaged solution
<b>Assessment:</b>	One report on a technical review of a specific category of current eHealth solutions (30%) of approximately 1000 words due in week 6, requiring 40-45 hours of work. ILOs 1 and 2 are addressed in this assignment. The report on a technical review is a hurdle and must be passed to pass the subject. One project report on a eHealth solution design project (50%). 10 minute class presentation and written report of approximately 2000 words due in week 10. Requires approximately 70-75 hours of work per student. ILOs 2 and 3 are addressed in this assignment. The project report is a hurdle and must be passed to pass the subject. One written evaluation of other students' eHealth solutions (20%) of approximately 1000 words due in week 12, requiring approximately 25-30 hours of work. ILOs 3 and 4 are addressed in the evaluation. The evaluation is a hurdle and must be passed to pass the subject. Hurdle requirement: to pass the subject, students must obtain: at least 50% of the marks available in the report on a technical review at least 50% of the marks available in the project report on a design project at least 50% of the marks available in the peer solution evaluation.
<b>Prescribed Texts:</b>	None
<b>Breadth Options:</b>	This subject is not available as a breadth subject.
<b>Fees Information:</b>	Subject EFTSL, Level, Discipline & Census Date, <a href="http://enrolment.unimelb.edu.au/fees">http://enrolment.unimelb.edu.au/fees</a>
<b>Generic Skills:</b>	On completion of this subject, students should have developed the following generic skills: <ul style="list-style-type: none"> <li># Understanding of global issues relating to health</li> <li># Understanding of diverse stakeholders in healthcare settings</li> <li># Creative thinking and problem-solving</li> </ul>
<b>Notes:</b>	<p><b>Learning and Teaching Methods</b> This subject is offered as a single 3-hour block of two 1 hour lectures plus one 1 hour tutorial per week over 12 weeks.</p> <p>Subject documents and class records are handled using LMS Blackboard.</p> <p><b>Indicative Key Learning Resources</b> This subject has no textbook. Students have access to lecture audio and slides in the LMS, as well as electronic full-text of recommended readings, including current journal articles, government documents and industry reports. 2013 examples of recommended readings are:</p> <p>Agency for Healthcare Research and Quality. 2013. Health IT tools and resources. <a href="http://healthit.ahrq.gov/portal/server.pt/community/health_it_tools_and_resources/919">http://healthit.ahrq.gov/portal/server.pt/community/health_it_tools_and_resources/919</a> (<a href="http://healthit.ahrq.gov/portal/server.pt/community/health_it_tools_and_resources/919">http://healthit.ahrq.gov/portal/server.pt/community/health_it_tools_and_resources/919</a>)</p> <p>Gardner N., Keller E., 2012. eHealth Safety. <a href="http://www.coachorg.com/en/publications/resources/CoachE-healthGardener-3.pdf">http://www.coachorg.com/en/publications/resources/CoachE-healthGardener-3.pdf</a></p> <p>Gelijns, A. C., Gabriel, S. E. 2012. Looking beyond translation--integrating clinical research with medical practice. <a href="http://211.144.68.84:9998/91keshi/Public/File/35/366-18/pdf/nejmp1201850.pdf">http://211.144.68.84:9998/91keshi/Public/File/35/366-18/pdf/nejmp1201850.pdf</a> (<a href="http://211.144.68.84:9998/91keshi/Public/File/35/366-18/pdf/nejmp1201850.pdf">http://211.144.68.84:9998/91keshi/Public/File/35/366-18/pdf/nejmp1201850.pdf</a>)</p> <p>National E-Health Transition Authority. 2013. Implementation approach. <a href="http://www.nehta.gov.au/ehealth-implementation">http://www.nehta.gov.au/ehealth-implementation</a> (<a href="http://www.nehta.gov.au/ehealth-implementation">http://www.nehta.gov.au/ehealth-implementation</a>)</p> <p><b>Careers/Industry Links</b> This subject is important in the field of eHealth and biomedical informatics, i.e. work that concerns the acquisition, storage, retrieval and use of information in, about and for human health, and the design and management of related solutions to advance the understanding and practice of healthcare. This subject is offered jointly by the Faculty of Engineering and the Faculty of Medicine, Dentistry and Health Sciences, and also uses expert guest speakers from industry and government.</p>
<b>Related Course(s):</b>	Doctor of Philosophy - Engineering Master of Information Systems Master of Information Systems Master of Information Systems Master of Information Technology

	Master of Information Technology Master of Philosophy - Engineering
<b>Related Majors/Minors/ Specialisations:</b>	MIS Professional Specialisation MIS Research Specialisation MIT Health Specialisation