COMP30022 IT Project

Credit Points:	12.5
Level:	3 (Undergraduate)
Dates & Locations:	2015, Parkville This subject commences in the following study period/s: Semester 2, Parkville - Taught on campus.
Time Commitment:	Contact Hours: 36 hours, comprising of one 1-hour lecture and two 1-hour workshops per week Total Time Commitment: 170 hours
Prerequisites:	

Subject	Study Period Commencement:	Credit Points:
INFO20003 Database Systems	Semester 2	12.50

AND

One of the following:

Subject	Study Period Commencement:	Credit Points:
SWEN30006 Software Modelling and Design	Semester 1, Semester 2	12.50
INFO30005 Web Information Technologies	Semester 1	12.50

Corequisites:	None
Recommended Background Knowledge:	None
Non Allowed Subjects:	Students cannot enrol in and gain credit for this subject and:

Subject	Study Period Commencement:	Credit Points:
SWEN30007 Software Systems Project	Not offered 2015	12.50
SWEN30004 Software Engineering Project	Semester 2	12.50
COMP30016 Computer Science Project	Not offered 2015	12.50
INFO30003 Informatics 6: e-Research Project	Not offered 2015	12.50

433-340 Software Engineering Project

615-373 Industrial Project

Core Participation Requirements:	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. 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: http://services.unimelb.edu.au/disability
Coordinator:	Assoc Prof Egemen Tanin

Contact:	email: **etanin@unimelb.edu.au (mailto:etanin@unimelb.edu.au)**
Subject Overview:	**AIMS** This subject is the capstone project for the Informatics major and the Computing and Software Systems major in the BSc. Students will work on a real life problem in a small team, supervised by a member of staff. Each team will analyse the information needs of users and develop working computational solutions. Students are expected to apply sound principles studied over the course of their degree to the formulation and solution of their problem. **INDICATIVE CONTENT** Students will work in teams to analyse, design, implement and test a non-trivial IT system. A key part of the project is for students to develop and manage a project in order to deliver a quality IT product. Workshops will explore the application of theory to the project and include selected topics drawn from: ethics, project management, design frameworks, testing, technical reviews, and product evaluation.
Learning Outcomes:	**INTENDED LEARNING OUTCOMES (ILO)** On completion of this subject the student is expected to: 1 Undertake problem identification, formulation and solution 2 Analyse, design, implement and test a system 3 Communicate effectively, not only with other IT professionals, but also with the community at large 4 Apply IT principles to the development of non-trivial systems
Assessment:	The three major components of assessment are based on the student's ability to participate and contribute to a team-based information technology project. Students will be assessed on their ability to: Work in small, diverse teams acting professionally and ethically Analyse, design, implement, and test a system, following prescribed processes Communicate effectively in written and oral presentations Contribute to team goals Assessment: The first major component is the team's ability to conduct problem formulation and design, reporting, and to manage its processes, which includes regular reviews in workshops throughout the semester (50%). Associated work will require approximately 50-55 hours of work. This assessment addresses ILOs 1, 2, 3 and 4 The second major component is the team’s final release of the product, 1000-2000 lines of code, submitted in week 12 (30%), requiring approximately 30 - 35 hours of work, that assesses the team’s ability to develop a non-trivial IT product using principles and techniques from computer science, software engineering, and informatics. This assessment addresses ILOs 1, 2 and 4 The third major component is based on the individual’s contribution to the project over the course of the semester. This ongoing assessment addresses ILO 3 (20%). A component of each submission addressing each of the (ILOs): ILOs 1, 2, and 4 are addressed by the assessment components 1 and 2 (management and project respectively) ILO 3 is addressed via the project management component of item 1 the individual component of item 3.
Prescribed Texts:	None
Breadth Options:	This subject potentially can be taken as a breadth subject component for the following courses: # **Bachelor of Arts (https://handbook.unimelb.edu.au/view/2015/B-ARTS)** # **Bachelor of Commerce (https://handbook.unimelb.edu.au/view/2015/B-COM)** # **Bachelor of Music (https://handbook.unimelb.edu.au/view/2015/B-MUS)** You should visit **learn more about breadth subjects (http://breadth.unimelb.edu.au/breadth/info/index.html)** and read the breadth requirements for your degree, and should discuss your choice with your student adviser, before deciding on your subjects.
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: # Ability to undertake problem identification, formulation and solution # Ability to utilise a systems approach to design and operational performance

	# Ability to function effectively as an individual and in multi-disciplinary and multi-cultural teams, with the capacity to be a leader or manager as well as an effective team member.
Notes:	**LEARNING AND TEACHING METHODS** The IT project provides a realistic learning environment with a realistic product specification. Tutors in the subject act as mentors and guide teams throughout the project. The interaction between the student team and the tutors often raise issues that provide the topics for workshops. The subject comprises one lecture and one two-hour workshop per week. Lectures are used to coordinate the teams, deliver theory and practice relevant to the stage of the project reached, and to share experiences between the teams. Workshops are used to discuss issues raised within the project, translate theory to practice relevant to the stage of the project reached, to provide hands-on practice with tools, and to share experiences. **INDICATIVE KEY LEARNING RESOURCES** The subject is administered through the Universities Learning Management System (LMS). Templates for the various artefacts, guidelines on IT processes and links to tools are available through LMS. A standard development environment is available which includes programming languages, libraries and development tools and is on most engineering computers **CAREERS / INDUSTRY LINKS** The IT industry is expanding and along with it the demand for IT professionals that are capable of the analytical and management skills beyond programming. The industry is also changing in the nature of the projects being undertaken with many IT professionals working in multidisciplinary project teams. The skills and experience gained in this subject are valued by employers and are often seen as a necessary grounding for a career in IT-related industries. The subject aims to source product ideas from clients outside of the Department where possible and thus seeks to expose students to the types of environments in which software development take place. Guest lectures by are also given to highlight aspects of industrial practice and to expose students to current practice.
Related Majors/Minors/ Specialisations:	Computer Science Computer Science Computer Science Computer Science Computing and Software Systems Health Informatics Informatics Master of Engineering (Software with Business) Master of Engineering (Software) Science-credited subjects - new generation B-SCI and B-ENG.