INFO30004 Usability Engineering

Credit Points: 12.50

Level: 3 (Undergraduate)

Dates & Locations: This subject is not offered in 2013.

Time Commitment: Contact Hours: 36 hours, comprising of two 1-hour lectures and one 1-hour tutorial per week
Total Time Commitment: 120 hours

Prerequisites: 50 points of 2nd level subjects

Corequisites: None

Recommended Background Knowledge: None

Non Allowed Subjects:

<table>
<thead>
<tr>
<th>Subject</th>
<th>Study Period Commencement</th>
<th>Credit Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>SINF30004 Human Computer Interaction</td>
<td>Not offered 2013</td>
<td>12.50</td>
</tr>
<tr>
<td>615-348 Human Computer Interaction</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Core Participation Requirements: <p>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.</p> <p>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">http://services.unimelb.edu.au/disability</a&gt;&lt;/p&gt;

Contact: Associate Professor Frank Vetere
email: f.vetere@unimelb.edu.au (mailto:f.vetere@unimelb.edu.au)

Subject Overview: How do you design information and communication technologies that are useful, usable and satisfying? Usability Engineering addresses this question. Usability is now a vital part of the IT industry for both work and leisure. We can see usability (or the lack of it) in the design of tablets, aircraft cockpits, business software, car navigation devices, and many other technologies.

In this subject students will learn concepts and techniques integral to engineering usable systems. These include: contextual analysis of human activities; principles for designing usable human computer interactions; styles of user interfaces; and methods to evaluate the usability of new designs. Students will also learn relevant theories underpinning these techniques including aspects of human cognition and the theory of natural design.

Objectives: On completion of this subject, students should be able to:

# Define and distinguish between the different types of user interface
# Exploit cognitive and social factors that make interactive software usable
# Apply key design principles and guidelines that assist user interface designers, and understand the limitations of such guidelines
# Apply techniques of Usability Engineering across the development lifecycle
# Develop a sound usability test and evaluation plan for a particular design project

Assessment: Students work in groups of three to complete a project. The group project consists of two parts. The first report (3000 words or equivalent) is due mid-semester and a second report (3000
words or equivalent) is due at the end of semester (50%). This project supports ILO 3, 4 and 5. One 2-hour examination held in the examination period (50%), supporting ILO 1, 2, 3 and 4 To pass the subject, students must obtain at least 50% overall, at least 50% for the group project, and at least 50% for the end-of-semester written examination.

<table>
<thead>
<tr>
<th>Prescribed Texts:</th>
<th>None</th>
</tr>
</thead>
</table>
| 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/2013/B-ARTS)  
  # [Bachelor of Commerce](https://handbook.unimelb.edu.au/view/2013/B-COM)  
  # [Bachelor of Environments](https://handbook.unimelb.edu.au/view/2013/B-ENVS)  
  # [Bachelor of Music](https://handbook.unimelb.edu.au/view/2013/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](http://enrolment.unimelb.edu.au/fees) |
| Generic Skills:   | On completion of this subject, students should have developed the following generic skills:  
  # Acquire design oriented problem-solving skills  
  # Review and research skills  
  # Team work skills  
  # Written and oral presentation skills |
| Related Majors/Minors/Specialisations: | Computing and Software Systems  
Informatics  
Science Informatics  
Science credit subjects* for pre-2008 BSc, BASc and combined degree science courses  
Science-credited subjects - new generation B-SCI and B-ENG. Core selective subjects for B-BMED. |
| Related Breadth Track(s): | Human Centred Computing  
Working with Information |