

## 485-707 Learning Mathematics with Technology

<b>Credit Points:</b>	25.00
<b>Level:</b>	9 (Graduate/Postgraduate)
<b>Dates &amp; Locations:</b>	2009, This subject commences in the following study period/s: Semester 1, - Taught on campus.
<b>Time Commitment:</b>	Contact Hours: 36 hours Total Time Commitment: Not available
<b>Prerequisites:</b>	None
<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>	Prof Kaye Christine Stacey
<b>Subject Overview:</b>	This subject surveys emerging possibilities for teaching and learning mathematics with information and communication technology. The uses of selected software such as dynamic geometry packages, spreadsheets, video and image analysis software, logo microworlds programming, and applets are surveyed. Participants will gain a range of practical skills as well as exploring pedagogical questions. Theoretical analyses of the impact of information technology on students' learning and thinking and on the curriculum are reviewed. This subject is suitable for teachers at all levels.
<b>Objectives:</b>	<p>At the completion of this subject, students will be able to:</p> <ul style="list-style-type: none"> <li># use competently a range of software for teaching mathematics;</li> <li># discuss major issues of teaching mathematics with technology, drawing on research findings and concepts;</li> <li># present research findings to academic and professional audiences;</li> <li># create teaching materials which demonstrate the potential of selected software for teaching.</li> </ul>
<b>Assessment:</b>	A presentation and accompanying article on teaching a topic using technology (3,500 words, 45 per cent), a critical review of the literature related to an issue relevant to the subject written for an academic audience (2,000 words 25 per cent) and for a professional audience (2,500 words 30 per cent). Participation in weekly seminars, including short presentations, is required.
<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>	<p>On completion of this subject, students should be able to:</p> <ul style="list-style-type: none"> <li># comprehend complex principles and express them lucidly;</li> <li># apply complex principles to solve pedagogical problems;</li> </ul>

	<ul style="list-style-type: none"><li># apply complex technologies to solve pedagogical problems;</li><li># think critically, creatively and independently.</li></ul>
<b>Links to further information:</b>	<a href="http://www.edfac.unimelb.edu.au">www.edfac.unimelb.edu.au</a>
<b>Related Course(s):</b>	Doctor Of Education Doctor of Education Master of Education (Stream 100A) Coursework and Thesis A Master of Education (Stream 100B) Coursework Master of Education (Stream 150) Major Thesis Master of Education (Stream 150A) Coursework and Thesis A Master of Education (Stream 150B) Coursework