

## 433-684 Machine Learning

<b>Credit Points:</b>	12.500
<b>Level:</b>	Graduate/Postgraduate
<b>Dates &amp; Locations:</b>	2008, This subject commences in the following study period/s: Semester 2, - Taught on campus.
<b>Time Commitment:</b>	Contact Hours: 24 hours of lectures, 11 hours of workshops; Non-contact time commitment: 84 hours Total Time Commitment: Not available
<b>Prerequisites:</b>	Previous study in artificial intelligence (433-303 or equivalent) and computer graphics (433-380 or equivalent) would be helpful but is not essential.
<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; <p>&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> </p>
<b>Subject Overview:</b>	This subject will provide an introduction to the field of machine learning. Machine learning is the task of unearthing regularities in data, and using these to enhance understanding of general processes or predict future events. Topics to be covered include: association rules, clustering, decision trees, decision rules, instance-based learning, statistical learning, numeric prediction, linear discrimination, weakly supervised classification, discretisation, feature selection and classifier combination.
<b>Assessment:</b>	Two projects expected to take approx. 36 hours in total during semester (50%) and one written examination 3-hour examination at the end of the semester (50%). Both forms of assessment must be completed satisfactorily to pass the subject.
<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 successful completion, students will: <ul style="list-style-type: none"> <li># have an understanding of a representative selection of web mining techniques in both theoretical and applied contexts</li> <li># be familiar with component technologies used in web-based information delivery</li> </ul>
<b>Notes:</b>	Credit may <b>not</b> be gained for both 433-484: Machine Learning and 433-684: Machine Learning
<b>Related Course(s):</b>	Master of Engineering in Distributed Computing Master of Information Technology Master of Information Technology Master of Software Systems Engineering