

## 433-460 Human Language Technology

<b>Credit Points:</b>	12.500
<b>Level:</b>	Undergraduate
<b>Dates &amp; Locations:</b>	2008, This subject commences in the following study period/s: Semester 1, - Taught on campus.
<b>Time Commitment:</b>	Contact Hours: Twenty-four hours of lectures, 11 hours of workshops Total Time Commitment: Not available
<b>Prerequisites:</b>	Study at the third-year level in at least four of the following areas: artificial intelligence, computer design, database systems, graphics, interactive system design, networks and communications, operating systems, programming languages and software engineering, and theory of computation. Completion of 620-201 Probability (or equivalent) would be an advantage.
<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>Subject Overview:</b>	<p>The objectives of this subject are for students be familiar with the foundations of symbolic and statistical natural language processing; be familiar with key concepts in language description and analysis; be able to develop and evaluate computational models of language; and be familiar with a variety of human language technologies.</p> <p>Topics covered include the linguistics of words and phrases, part-of-speech tagging, finite-state transducers, chart parsing and chunk parsing, hidden Markov models, n-gram language models, spelling and grammar checking, collocation analysis, word-sense disambiguation, text retrieval, information extraction, and machine translation. Programming work will be undertaken in the Python language, and will use NLTK, the Natural Language Toolkit (nltk.sf.net).</p>
<b>Assessment:</b>	Four projects, expected to take about 36 hours, during semester (50%) and a 2-hour end-of-semester written examination (50%). To pass the subject, students must obtain at least 50% overall, 25/50 in assignments and project combined, and 25/50 in the written examination.
<b>Prescribed Texts:</b>	None
<b>Recommended Texts:</b>	Information Not Available
<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>	Information Not Available

<b>Notes:</b>	Credit may not be gained for both 433-460 Human Language Technology and 433-660 Human Language Technology.
<b>Related Course(s):</b>	Bachelor of Computer Science (Honours) Bachelor of Engineering (Computer Engineering) Bachelor of Engineering (Electrical Engineering) Bachelor of Engineering (Software Engineering)