

## 436-461 Advanced Mechanics of Solids

|  |   |
|--|---|
| <b>Credit Points:</b>                    | 12.50   |
| <b>Level:</b>                            | 4 (Undergraduate)   |
| <b>Dates &amp; Locations:</b>            | This subject is not offered in 2009.  |
| <b>Time Commitment:</b>                  | Contact Hours: Thirty-six hours of lectures and 12 hours of tutorials, assignments and /or laboratories<br>Total Time Commitment: Not available   |
| <b>Prerequisites:</b>                    | 436-431 Mechanics 4 or equivalent   |
| <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>                 | <p>Students completing this subject should have a deeper understanding of the finite element method and develop advanced analysis skills in the other topics selected.</p> <p>The content of the subject will comprise a selection from the finite element method and its application to practical problems in stress analysis; bending and buckling of plates and shells, anisotropic elasticity and its application to composite materials; viscoelasticity and engineering plasticity.</p>   |
| <b>Objectives:</b>                       | -   |
| <b>Assessment:</b>                       | One 3-hour examination at the end of semester (80%), 2 assignments not exceeding 2000 words each excluding computations, diagrams, tables and computer output due half and three-quarters of the way through the semester (20%).  |
| <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>                            | This subject may NOT be offered every year. Not available in 2009. Please refer to the Department of Mechanical Engineering.  |
| <b>Related Course(s):</b>                | Bachelor of Engineering (Mechatronics) and Bachelor of Computer Science   |