

208-152 Agricultural Technology

Credit Points:	12.50
Level:	1 (Undergraduate)
Dates & Locations:	2009, This subject commences in the following study period/s: Semester 2, - Taught on campus.
Time Commitment:	Contact Hours: Thirty-six hours of lectures and 36 hours of tutorials/practicals Total Time Commitment: Not available
Prerequisites:	None
Corequisites:	None
Recommended Background Knowledge:	None
Non Allowed Subjects:	None
Core Participation Requirements:	<p><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: http://services.unimelb.edu.au/disability</p></p>
Coordinator:	Dr Graham Ian Brodie
Subject Overview:	<p>On completion of this subject students should be able to:</p> <ul style="list-style-type: none"> # understand the role of engineering in current agricultural and related practices; # apply to these practices the relevant basic laws and principles of engineering; # identify and know the use of a range of agricultural and related equipment; # understand and measure machinery performance, capacity and efficiency of a number of machines; # make necessary machinery adjustments to improve performance and efficiency; # determine the size and select an appropriate machine to perform a specific task; and # understand environmental control techniques and their associated structures. <p>This subject covers the role of engineering in agriculture, develops the principles and explains the laws that are necessary to determine agricultural machinery performance specifications, fluid behaviour for both hydraulic power transmission and rural water supply specifications, and agricultural structures requirements. Topics covered will include:</p> <ul style="list-style-type: none"> # performance: mechanical performance, hydraulic performance, pressure, flow rate, torque, power, velocity and speed, efficiency, stress, strain, voltage and current, measurement, accuracy, power transmission, engine cycles, engine components, engine performance, maintenance; # fluid behaviour: pressure, flow rate, head, head loss, pump and motor performance, pipe flow, pipe and pump specifications; # structural requirements: functional design, loads, materials, controlled environments.

Assessment:	One 2.5-hour written examination worth 40% of final marks, two assignments equivalent to 3000 words and worth 30% of final marks each.
Prescribed Texts:	None
Recommended Texts:	Information Not Available
Breadth Options:	<p>This subject potentially can be taken as a breadth subject component for the following courses:</p> <ul style="list-style-type: none"> # Bachelor of Arts (https://handbook.unimelb.edu.au/view/2009/D09) # Bachelor of Commerce (https://handbook.unimelb.edu.au/view/2009/F04) # Bachelor of Environments (https://handbook.unimelb.edu.au/view/2009/A04) # Bachelor of Music (https://handbook.unimelb.edu.au/view/2009/M05) <p>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.</p>
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Generic Skills:	Information Not Available
Notes:	NOT OFFERED IN 2008. Students repeating this subject will be offered a flexible delivery package of undertake 208-127 Data and Decisions.
Related Course(s):	Associate Degree in Agriculture