

## 297BB Bachelor of Food Science (Honours)

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| <b>Year and Campus:</b>              | 2010 - Parkville  |
| <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>Level:</b>                        | Undergraduate   |
| <b>Duration &amp; Credit Points:</b> | 100 credit points taken over 12 months full time. This course is available as full or part time.  |
| <b>Coordinator:</b>                  | Dr Said Ajlouni   |
| <b>Contact:</b>                      | <p>Dr Said Ajlouni, Course Co-ordinator, Melbourne School of Land and Environment, The University of Melbourne, Parkville. Phone: +61 3 8344 8620 Email: <a href="mailto:said@unimelb.edu.au">said@unimelb.edu.au</a> (<a href="mailto:said@unimelb.edu.au">mailto:said@unimelb.edu.au</a>)</p> <p>Ms Louisa King, Undergraduate Student Administration Officer, Melbourne School of Land and Environment, The University of Melbourne, Parkville. Phone: +61 3 8344 6390 Email: <a href="mailto:kingl@unimelb.edu.au">kingl@unimelb.edu.au</a> (<a href="mailto:kingl@unimelb.edu.au">mailto:kingl@unimelb.edu.au</a>)</p>   |
| <b>Course Overview:</b>              | <p>The honours year in food science is a very valuable year of study. It comprises advanced coursework and an individual research project designed to extend students' knowledge and skills in solving food industry research problems. After successfully completing the program, students will be prepared to either enter the workforce pursuing a career with food and dairy companies, or enrol for further research study through applying for a masters or doctor of philosophy degree.</p> <p>The honours course is comprised of coursework (three subjects, 37.5%) and a research project (62.5%). The three coursework subjects will be selected from those offered at graduate certificate, graduate diploma and advanced undergraduate levels, by the Melbourne School of Land and Environment and other faculties of the University. They will enable students to gain sufficient familiarity with the fields relevant to their research project. Applicants to the program will need to demonstrate the completion of appropriate prerequisite subjects in their undergraduate courses when selecting coursework subjects. Final subject choice will be approved by the research project supervisor. Students will also be expected to participate in research discussion groups or 'journal clubs' and attend the department's research seminar series.</p> <p><b>Assessment</b></p> <p>Assessment of subjects constituting the coursework component of the program will be conducted as stipulated in the subject outlines published in the University Handbook. The overall grade for the honours year will be a weighted average of results achieved in the subjects making up the coursework and the mark obtained for the research thesis. In order to be awarded the honours qualification, students must achieve an overall weighted average of at least 65 per cent for their honours studies.</p> |
| <b>Objectives:</b>                   | <p>Students who have completed this course should have acquired:</p> <ul style="list-style-type: none"> <li># a detailed knowledge of scientific principles underpinning the conversion of raw agricultural products into safe, nutritious and interesting food;</li> <li># an ability to understand the context of food production from different perspectives, including: the regulatory environment governing the supply of safe and high quality food; international trade; agricultural production and supply chain management; biotechnological innovation and food production;</li> <li># skills to understand and analyse major emerging issues facing food production and the trends in processing science and technology being developed to solve emerging problems;</li> <li># an understanding of the structure and organisation of the food processing industry and where this abuts agricultural production;</li> <li># technical and leadership skills in the development of new processes and products;</li> <li># skills to exchange, acquire and disseminate scientific information for the benefit of the food industry;</li> </ul>  |

|   | <ul style="list-style-type: none"> <li># understanding of environmental issues relevant to food production and the technology needed to address these issues across the production chain;</li> <li># a capacity and motivation for continuing independent learning; and</li> <li># understanding of the rights, privileges and responsibilities conferred with the degree and memberships of professional associations.</li> </ul>   |                |                            |                |                                    |           |       |                                  |                  |       |  |            |    |         |                            |                |  |            |       |                                   |            |       |
|---|--|----------------|----------------------------|----------------|------------------------------------|-----------|-------|----------------------------------|------------------|-------|--|------------|----|---------|----------------------------|----------------|--|------------|-------|-----------------------------------|------------|-------|
| <b>Course Structure &amp; Available Subjects:</b> | 297BB - Bachelor of Food Science (Honours)   |                |                            |                |                                    |           |       |                                  |                  |       |  |            |    |         |                            |                |  |            |       |                                   |            |       |
| <b>Subject Options:</b>                           | <p><b>BACHELOR OF FOOD SCIENCE (HONOURS)</b></p> <p>The honours course is comprised of coursework and a research project. The coursework subjects consist of core subjects, and electives to be selected essentially from 400-level subjects offered by the Melbourne School of Land and Environment and other faculties of the University. They will enable students to gain sufficient familiarity with the fields relevant to their research project. Up to two subjects not appearing on the recommended list can be taken for credit, subject to course coordinator approval. Students may select two 300-level subjects for credit, subject to course coordinator approval. Applicants to the program will need to demonstrate the completion of appropriate prerequisite subjects in their undergraduate courses when selecting coursework subjects. Students will also be expected to participate in research discussion groups or 'journal clubs' and to attend the Faculty's research seminar series.</p> <p><b>HONOURS RESEARCH PROJECT</b></p> <p>Students will select a project from a list formulated by supervisors. Some of these projects may be offered in collaboration with food or agricultural companies, and collaborating institutions such as Food Science Australia. Project proposals detailing the experimental plan and a literature review will be presented before the departmental Honours Panel for discussion and approval prior to commencing experimental work. Students will be required to present seminars on both their project proposal and the outcomes of their research. The expected volume of the thesis (including references) will normally be limited to 20 000 words (approximately 50 A4 pages).</p> <table border="1" data-bbox="387 1131 1485 1393"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>AGRI40001 Honours Research Project</td> <td>Year Long</td> <td>62.50</td> </tr> <tr> <td>202-402 Honours Research Project</td> <td>Not offered 2010</td> <td>62.50</td> </tr> <tr> <td>AGRI40003 Honours Research Project (MYE)</td> <td>Semester 1</td> <td>25</td> </tr> </tbody> </table> <p><b>SELECTIVES</b></p> <p><b>Students Must complete one of the following subjects:</b></p> <p>208-411 Research Philosophies and Statistics <b>or</b> 207-414 Social Research Methods.</p> <table border="1" data-bbox="387 1518 1485 1722"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>MAST40001 Research Philosophies and Statistics</td> <td>Semester 1</td> <td>12.50</td> </tr> <tr> <td>NRMT40005 Social Research Methods</td> <td>Semester 1</td> <td>12.50</td> </tr> </tbody> </table> <p><b>ELECTIVE SUBJECTS</b></p> <p>Students Must complete two elective subjects chosen from 300/400 level subjects.<br/>Subject selection must be sanctioned by the course coordinator.</p> | Subject        | Study Period Commencement: | Credit Points: | AGRI40001 Honours Research Project | Year Long | 62.50 | 202-402 Honours Research Project | Not offered 2010 | 62.50 | AGRI40003 Honours Research Project (MYE) | Semester 1 | 25 | Subject | Study Period Commencement: | Credit Points: | MAST40001 Research Philosophies and Statistics | Semester 1 | 12.50 | NRMT40005 Social Research Methods | Semester 1 | 12.50 |
| Subject   | Study Period Commencement:   | Credit Points: |                            |                |                                    |           |       |                                  |                  |       |  |            |    |         |                            |                |  |            |       |                                   |            |       |
| AGRI40001 Honours Research Project                | Year Long  | 62.50          |                            |                |                                    |           |       |                                  |                  |       |  |            |    |         |                            |                |  |            |       |                                   |            |       |
| 202-402 Honours Research Project                  | Not offered 2010   | 62.50          |                            |                |                                    |           |       |                                  |                  |       |  |            |    |         |                            |                |  |            |       |                                   |            |       |
| AGRI40003 Honours Research Project (MYE)          | Semester 1   | 25             |                            |                |                                    |           |       |                                  |                  |       |  |            |    |         |                            |                |  |            |       |                                   |            |       |
| Subject   | Study Period Commencement:   | Credit Points: |                            |                |                                    |           |       |                                  |                  |       |  |            |    |         |                            |                |  |            |       |                                   |            |       |
| MAST40001 Research Philosophies and Statistics    | Semester 1   | 12.50          |                            |                |                                    |           |       |                                  |                  |       |  |            |    |         |                            |                |  |            |       |                                   |            |       |
| NRMT40005 Social Research Methods                 | Semester 1   | 12.50          |                            |                |                                    |           |       |                                  |                  |       |  |            |    |         |                            |                |  |            |       |                                   |            |       |
| <b>Entry Requirements:</b>                        | <p>All applicants must satisfy the following two requirements.</p> <ul style="list-style-type: none"> <li># Applicants must hold a bachelors level degree in any of the following areas: agricultural science, biological science (preferred majors in biochemistry or microbiology), chemistry, engineering or food science.</li> </ul>   |                |                            |                |                                    |           |       |                                  |                  |       |  |            |    |         |                            |                |  |            |       |                                   |            |       |

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|   | # The minimum entry requirement is an average mark of at least 65 in the third year (300-level) subjects of the degree.   |
| <b>Core Participation Requirements:</b> | 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. This course requires all students to enrol in subjects where they must actively and safely contribute to field excursions and laboratory activities. Students who feel their disability will impact on meeting this requirement are encouraged to discuss this matter with the Subject Coordinator and Disability Liaison Unit (8344 7068 or DLU-enquiries@unimelb.edu.au). Students enrolling in the Melbourne School of Land and Environment are advised that some courses of study may put them at an increased risk of contracting Q Fever. Q Fever is a relatively common, preventable condition which while rarely fatal, can cause a severe acute illness and can result in damage to heart valves and chronic fatigue. It is recommended that students consider undertaking screening and vaccination for Q Fever prior to commencement of study. Students may be required to provide proof of vaccination prior to undertaking some coursework. Your course coordinator will advise you of this requirement prior to commencement of the study semester. Vaccine costs for students are not covered by the Pharmaceutical Benefits Scheme (PBS), Medicare, or by the University. Some students with full private health coverage (which has hospital and ancillary cover) may receive partial re-imbursment for vaccine costs. |
| <b>Further Study:</b>                   | Melbourne School of Land and Environments offers excellent opportunities for students to pursue postgraduate studies in the fields of agricultural science, forestry, natural resource management, urban horticulture, food science, animal welfare, wood science, agribusiness, wine technology and viticulture, forest ecosystem science. Programs available include Postgraduate Diplomas, Masters (by coursework), Masters (by research) and Doctoral degrees.  |
| <b>Graduate Attributes:</b>             | Graduates will be expected to: have a strong sense of intellectual integrity and the ethics of scholarship have in-depth knowledge of their specialist discipline(s) examine critically, synthesise and evaluate knowledge across a broad range of disciplines have the capacity to participate fully in collaborative learning and to confront unfamiliar problems be advocates for improving the sustainability of the environment  |
| <b>Generic Skills:</b>                  | Generic skills acquired: <ul style="list-style-type: none"> <li># an awareness of, and ability to utilize appropriate communication technology and methods for the storage, management and analysis of data</li> <li># a capacity for creativity and innovation, through the application of skills and knowledge</li> <li># highly developed written communication skills to allow informed dialogue with individuals and groups from industry, government and the community</li> <li># highly developed oral communication skills to allow informed dialogue and liaison with individuals and groups from industry, government and the community</li> <li># an ability to participate effectively as part of a team</li> <li># an ability to plan work, use time effectively and manage small projects</li> </ul>  |