

# Master of Science in Food Innovation (180 Credit) – Course Planner

Semester One	<b>FOOD 601</b> <b>Food Processing and Quality</b> Thermal and non-thermal food processing, product quality assessment; food composition and chemistry; food processing; links between food composition, processing and product evaluation.  <i>Examiner: Dr Lokesh Kumar</i>	<b>MICR 604</b> <b>Advanced Microbiology</b> Advanced topics in food, soil, environmental, general or wine microbiology.  <i>Examiner: Prof Stephen On</i>	<b>FOOD 602 – Food &amp; Nutritional Biochemistry</b> Topics on food/feed constituents, biological availability of nutrients, evaluation of food quality and/or contemporary issues of nutritional biochemistry focussing on the role of nutrition in selected human health issues.  <i>Examiner: Dr Keegan Burrow</i>
Semester Two	<b>FOOD 606</b> <b>Food Safety and Security</b> Advanced study of microbiological, pesticide, heavy metal hazards, climate change with emphasis on food safety and security aspects across food processing sectors (e.g. dairy, meat, poultry, seafood, ready-to-eat/processed foods, etc.).  <i>Examiner: Prof Stephen On</i>	<b>FOOD 607</b> <b>Sensory Science and Techniques</b> A study of physical and chemical attributes of food and beverage products that affect sensory characteristics, sensory analysis procedures and their applicability for understanding consumer perception.  <i>Examiner: Dr Shaoyang Wang</i>	<b>SCIE 601</b> <b>Laboratory Experimentation</b> Application of laboratory techniques to biological problems. Design, analysis and presentation of scientific experiments.  <i>Examiner: Dr Hannah Lee</i>
Semester Three	<b>FOOD 604</b> <b>Food Product Innovation</b> A study of the theoretical and practical challenges in the development and marketing of new food products. The course links food processing – sensory analysis – consumer preference – marketing and ingredient technology.  <i>Examiner: Dr Mirja Ahmed</i>	<b>FOOD 697</b> <b>Research Issues in Food</b> Advanced studies in current issues facing both the national and global food industry. <i>Examiner: Dr Venkata Chelikani</i> <b>AND</b> <b>FOOD 698</b> <b>Research Essay</b> Literature review on advanced study of aspects of food science. <i>Examiner: Dr Venkata Chelikani</i>	<b># FOOD 660: Research Dissertation (40 credits)</b> Students will conduct a research project and submit a report reviewing pertinent literature, documenting the research undertaken, the value of the experience gained and conclusions reached.  <i>Examiner: Assigned Supervisor</i>

\* **NOTE:** (1) All courses are 20 credits except FOOD 660 (40 Credits); # Only students with a **A-** average who have started their studies in the first semester could be considered eligible for FOOD 660 (Research Dissertation; 40 Credits) in 3rd semester (instead of FOOD 697 and 698).