Master Programme in Food Technology and Nutrition: Programme syllabus

1 Aim and outcomes

1.1 Aim
This internationally oriented master’s programme aims to provide specialised theoretical knowledge in a practical technological context in order to make students employable for advanced tasks in society and industry. The programme aims to provide qualifications for both professional activities in society and industry and for research studies. In addition to the syllabus, general regulations and information for the Faculty of Engineering apply to this programme.

1.2 Outcomes for a Degree of Master of Science (120 credits)
(Higher Education Ordinance 1993:100)

Knowledge and understanding
For a Degree of Master of Science (120 credits) the student shall
- demonstrate knowledge and understanding in the main field of study, including both broad knowledge of the field and a considerable degree of specialised knowledge in certain areas of the field as well as insight into current research and development work, and
- demonstrate specialised methodological knowledge in the main field of study.

Competence and skills
For a Degree of Master of Science (120 credits) the student shall
- demonstrate the ability to critically and systematically integrate knowledge and analyse, assess and deal with complex phenomena, issues and situations even with limited information
- demonstrate the ability to identify and formulate issues critically, autonomously and creatively as well as to plan and, using appropriate methods, undertake advanced tasks within predetermined time frames and so contribute to the formation of knowledge as well as the ability to evaluate this work
- demonstrate the ability in speech and writing both nationally and internationally to report clearly and discuss his or her conclusions and the knowledge and arguments on which they are based in dialogue with different audiences, and
- demonstrate the skills required for participation in research and development work or autonomous employment in some other qualified capacity.

Judgement and approach
For a Degree of Master of Science (120 credits) the student shall
- demonstrate the ability to identify and formulate issues critically, autonomously and creatively as well as to plan and, using appropriate methods, undertake advanced tasks within predetermined time frames and so contribute to the formation of knowledge as well as the ability to evaluate this work
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- demonstrate the ability to identify the personal need for further knowledge and take responsibility for his or her ongoing learning.

1.3 Specific outcomes for a Degree of Master of Science (120 credits)
For a Degree of Master of Science (120 credits) students must demonstrate the knowledge and skills required for working independently in research and development or in another advanced context within the area of food technology and nutrition.

Knowledge and understanding
For a Degree of Master (120 credits) students shall
- demonstrate specialised knowledge of the disciplinary foundations of engineering and science relevant to the field of food technology and nutrition;
- demonstrate the ability to analyse entire systems as well as sub-systems in industrial food production;
- demonstrate insight into current research and development work in the field.

Competence and skills
For a Degree of Master of Science (120 credits) students shall
- demonstrate the ability to identify, formulate and deal with complex issues in the field autonomously and with a holistic approach;
- demonstrate the ability to participate in research and development projects in the field;
- demonstrate the ability to acquire new knowledge in the field and integrate this with previous knowledge;
- demonstrate the ability to autonomously plan and undertake advanced tasks in the field;
- demonstrate the ability to develop and design systems and processes of industrial food production while taking into account the circumstances and needs of individuals and the targets of local and global society for sustainable development;
- demonstrate the ability to clearly report in speech and writing their knowledge and different types of project work, including background material, investigation and findings in international contexts.

Judgement and approach
For a Degree of Master of Science (120 credits) students shall
4 Degree

4.1 Degree requirements
For a Degree of Master of Science (120 credits) students must successfully complete courses comprising 120 credits, including a degree project worth 30 credits. 75 credits must be second-cycle credits, including the degree project.

4.1.1 Degree project
For a Degree of Master of Science (120 credits) students must complete an independent project (degree project) of no less than 30 credits as part of the course requirements. The degree project must be completed in accordance with the valid course syllabus in any of the following subjects:
- Applied Biochemistry
- Applied Microbiology
- Applied Nutrition and Food Chemistry
- Biotechnology
- Food Engineering
- Food Technology
- Technical Analytical Chemistry

4.2 Degree and degree certificate
When students have completed all the degree requirements, they are entitled to apply for a degree certificate for a Master of Science (120 credits). Main Field of Study: Food Technology and Nutrition.