



SLUkurs

Sustainable Food Systems – Master´s Programme

Version 3. Is valid between autumn 2020 and spring 2021

DECISION

Programme code:

NM028

Scope:

120 ECTS

Date:

2017-10-11

Decision by:

Utbildningsnämnden

Revised by:

2020-01-24

Programnämnden för utbildning inom naturresurser och jordbruk (PN - NJ)

SLU Id:

SLU ua 2020.3.1.1-346

Board responsible:

Programnämnden för utbildning inom naturresurser och jordbruk (PN - NJ)

PRIOR KNOWLEDGE AND OTHER ENTRY REQUIREMENTS

Admission to the Master's programme Sustainable Food Systems requires a first-cycle qualification comprising 180 credits and including specialised studies comprising 90 credits within one of the following subjects/disciplinary domains:

- natural science
- social science

Applicants with the equivalent qualifications obtained by means of a degree from another country, or with the equivalent knowledge obtained in some other way, may also be regarded as fulfilling the specific entry requirements.

This programme is taught in English. The applicant must further have a level of English equivalent to upper secondary school English, called English 6. An applicant with a first-cycle qualification from SLU comprising 180 credits automatically fulfils this requirement. Special rules apply for applicants with qualifications from

one of the Nordic countries and some English-speaking countries.

Specific requirements apply for admission to the individual courses included in the programme.

INTENDED LEARNING OUTCOMES

General objectives

The general objectives for first- and second-cycle courses and programmes are specified in the Swedish Higher Education Act (Chapter 1, Sections 8–9).

Objectives for a Degree in XX

In accordance with the annex to the Ordinance for the Swedish University of Agricultural Sciences, for a degree of Master (120 credits) the student shall:

Knowledge and understanding

- 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 specialized methodological knowledge in the main field of study.

Competence and skills

- 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 clearly report 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

- demonstrate the ability to make assessments in the main field of study informed by relevant disciplinary, social and ethical issues and also to demonstrate awareness of ethical aspects of research and development work
- demonstrate insight into the possibilities and limitations of research, its role in society and the responsibility of the individual for how it is used, and

- demonstrate the ability to identify the personal need for further knowledge and take responsibility for his or her ongoing learning.

DEGREE

Degree awarded on completion of the programme

Upon completion of the programme, the degree of Master of Science is awarded. Other general qualifications may be awarded, provided that the requirements are fulfilled. More information can be found in SLU's degree regulations.

Students who fulfil the qualification requirements for a degree will be issued a degree certificate upon request. The degree certificate will specify the qualification as Degree of Master of Science (120 credits) with a Major in Food Science.

Degree requirements

A degree of Master of Science (120 credits) with a major in food science is awarded to students who fulfil the course requirements (courses with a Pass grade) of 120 credits, of which at least 90 credits at second-cycle level, according to the following:

- at least 30 credits of courses with specialised study in the main field food science (A1N; A1F),
- at least 30 credits from an independent project (degree project) in the main field food science (A2E).

In addition, the student must hold a degree of Bachelor or professional qualification of at least 180 credits or an equivalent qualification.

CONTENT AND OUTLINE

Programme description

The overall objective for the programme is to provide understanding of and skills for sustainable development in food systems in light of challenges in local and global contexts. Food systems ranges from primary production, processing, packaging, distribution, marketing, sales, cooking and consumption to waste treatment. Sustainable development solutions require multi-disciplinary perspectives in a resource based view of circular systems. Hence, this programme includes students with both science and social science backgrounds.

Teaching approaches aim to develop dialogue and networks involving students, lecturers and guest lecturers. Opportunity to collaborate with stakeholders representing authorities, corporations and organisations is offered in interactive course modules based on cases, fieldwork and commissioned projects on current issues.

A central part of the programme has to do with product, process and system innovation and the role that development may play in sustainable development.

Students gain understanding of resource needs as well as how they may serve as promoters in various roles in these food systems. Students on this programme are trained to initiate, organise and lead processes that are aimed at sustainable development in food systems. These skills include the capacity to assess and evaluate risks and handling conflicts of interest among stakeholders in various contexts. During the course of the programme, students face complex problems that offer training grounds for critically reviewing data, working independently as well as in groups, identifying key issues, reviewing, evaluating and arguing possible alternative solutions. The programme integrates contemporary approaches and research findings with food system related needs for sustainable development.

During the first year, three courses are offered to provide an overview of sustainable development in food systems, knowledge about the prerequisites for ongoing and future development and skills to handle challenges linked to these areas. The content of these year 1 courses focus on:

- developing an understanding of system perspectives on circular systems of production, processing and consumption of food,
- identifying options and challenges related to the development of sustainable and innovative food products, processes and systems,
- evaluating current and future food products and food systems from a sustainability perspective.

The programme includes elective courses which offer students the opportunity to specialize in an area of their choice and concludes with an independent project (degree project) corresponding to 30 credits. Please note that students who meet the entry requirements for the programme are not necessarily qualified for admission to all courses on the programme. Some courses require a certain number of credits at first-cycle level in a natural science subject, such as biology or food science. Where this is the case, it is indicated in the list of courses below.

The programme prepares the students for continued academic studies or work in food companies, organisations or authorities.

Courses in the programme

Main fields of study

BI=Biology, FÖ=Business Administration, LB=Agriculture Science, LK=Landscape Architecture, LU=Rural development, LV=Food Science, MX=Environmental Science, ÖT=Interdisciplinary Science

Year 1

Prospects and challenges of sustainable food systems 15 cr LV, A1N

Management perspectives for sustainable food systems 15 cr FÖ, A1N

Project management for innovation in sustainable food systems 15 cr LV, A1F
 Global food systems and food security 15 cr LU, A1N
 Consumer behaviour, food choice and sustainable food consumption 15 cr FÖ/LV
 A1F
 Animal food science 15 cr LV, A1N (Eligibility in Natural Science)

Year 2

Scientific methods, tools and thesis writing, 15 cr, LB, A1N
 Food waste - current situation and future opportunities 7,5 cr LV/MX, A1N
 Ecology for fish management and conservation, 15 cr, BI, A1N (Eligibility in Natural Science)
 Food ethics, 7,5 cr, LV, A1N
 Human nutrition and physiology, 15 cr, LV, A1N (Eligibility in Natural Science)
 Principles of fisheries science, 15 cr, BI, A1N (Eligibility in Natural Science)
 Sustainable agri-food value chains and bioeconomy 15 cr FÖ/TV, A1N
 The process of research: qualitative methods, data analysis and academic writing, 15 cr, LU, A1N
 Plant food science, 15 cr, LV, A1N (Eligibility in Natural Science)
 Environmental economics and management 15 cr FÖ/TV A1N
 Research methods for people and environment studies, 15 cr LK/MP, A1N
 Master thesis in food science, A2E, 30 cr, LV
 Master thesis in food science, A2E, 60 cr, LV

Other Courses

Qualified work placement 2, 7,5 cr, ÖT, AXX
 Qualified work placement 2, 15 cr, ÖT, AXX
 Interdisciplinary practice 15 cr MX, AXX

The courses offered may change during the course of the programme. Decisions on the courses offered are taken well in advance of the next academic year.

For each course, there is a course syllabus providing more detailed course information. Information on when courses are offered is available on the SLU student web.

OTHER INFORMATION

General regulations for first- and second-cycle courses and programmes

For more information on semester dates, examination and credit transfer, see the Regulations for education at Bachelor's and Master's level available on the SLU student web.

Possibilities for further studies

Students who complete the programme and are awarded a degree of Master have the option to continue their studies at doctoral level.