



# SLUkurs

## Agroecology - Master´s Programme

**Version 2.** Is valid between autumn 2012 and spring 2019

**Programme code:**

LM005

**Scope:**

120 ECTS

**Level affiliation:**

2 - Second cycle

**Degree**

Degree of Master of Science

**Responsible faculty:**

Faculty of Landscape Architecture, Horticulture and Crop Production Science

**Appendices**

- Appendix 1213
- Appendix 1314
- Appendix 1415
- Appendix 1516
- Appendix 1617
- Appendix 1718
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**1. Decision**

The Vice-chancellor of the Swedish University of Agricultural Sciences decided on October 5, 2009 to establish the Master's programme (120 credits) in Agroecology. The programme syllabus was decided on December 10, 2009 by the Dean of the Faculty Board at the Faculty of Landscape Planning, Horticulture and Agricultural Science to apply from the academic year 2010/11. Revisions were made due to the decision of the Vice-Chancellor June 29, 2012. This version applies from the academic year 2012/13.

The Agroecology - Master's Programme leads to a Degree of Master (120 credits) at second-cycle level and comprises 120 credits. The programme has the following programme code: LM005.

**2. Prior knowledge and other requirements**

### *2.1. Previous studies*

To be eligible for the Agroecology - Master's programme, the requirements are a Degree of Bachelor corresponding to a minimum of 180 credits, including 90 credits specialization in one of the following subjects/educational areas:

- Natural sciences
- Economics/administration
- Ethnology
- Cultural geography
- Geography
- Human ecology
- Leadership and organization
- Political science
- Sociology
- Social anthropology

or the equivalent overseas degree,

and specific entry requirements including English language proficiency demonstrated as:

- English B (Swedish secondary school) or equivalent.

Grade requirement: A minimum grade of Pass in the course above.

The specific entry requirements according to the above can also be fulfilled by those having corresponding qualifications from present or former Swedish colleges or learning establishments. The requirements are also fulfilled if corresponding qualifications have been obtained in alternative ways.

For entry to the different courses included within the programme, the specific entry requirements prescribed for each individual course apply.

## **3. Intended learning outcomes**

### *3.1 General learning outcomes*

In accordance with the Swedish Higher Education Act (1 chap, 9 §), second-level education shall “involve a deepening of knowledge, skills and abilities relative to first level education and, in addition to what applies to first level education, shall

- further develop the student's ability to independently integrate and use knowledge,
- develop the student's ability to deal with complex phenomena, issues and situations, and

- develop the student's potential for professional activities that demand considerable independence or for research and development work."

### *3.2 Specific learning outcomes for a Degree of Master (120 credits)*

In accordance with the Appendix to the Ordinance for the Swedish University of Agricultural Sciences, students must fulfil the following objectives for a Degree of Master (120 credits):

#### *Knowledge and understanding*

For a Degree of Master (120 credits), the student shall

- demonstrate knowledge and understanding within the main area of the education, incorporating both broad knowledge of the area and essentially deepened knowledge within certain parts of this area, and a deeper insight into current research and development work, and
- demonstrate a deepened knowledge of methods within the main area of the education.

#### *Competence and skills*

For a Degree of Master (120 credits), the student shall

- demonstrate the ability to critically and systematically integrate knowledge and analyse, evaluate and manage complex phenomena, issues and situations, even with limited information,
- demonstrate the ability to critically, independently and creatively identify and formulate issues and to plan and, using adequate methods, execute qualified tasks within a given time frame and thus contribute to the extension of knowledge, and evaluate this work,
- demonstrate the ability to report and discuss in both national and international contexts, orally and in writing, their conclusions and the knowledge and arguments that form the basis for these in dialogue with different groups, and
- demonstrate the skills required to participate in research and development work, or to work independently in other qualified activities.

#### *Judgement and approach*

For a Degree of Master (120 credits), the student shall

- demonstrate the ability within the main area of the education to make evaluations with respect to relevant scientific, sociological and ethical aspects and demonstrate awareness of ethical aspects of research and development work,
- demonstrate an insight into the possibilities and limitations of science, its role in society and people's responsibilities regarding how it is used, and
- demonstrate the ability to identify their need for further knowledge and take responsibility for developing their knowledge.

### *3.3 Detailed learning outcomes for the Agroecology - Master's programme (120 credits)*

Within the framework of the learning outcomes in the qualification description, SLU has specified the following learning outcomes for the Master's programme in Agroecology.

#### *Knowledge and understanding*

For a Degree of Master (120 credits), the student shall

- demonstrate understanding of both natural and anthropogenic processes that generate agroecological systems;
- be able to identify and describe the complex, integrated socio-economical and ecological contexts of agroecological systems;
- demonstrate understanding of different stakeholders' roles in agroecological systems management; and
- demonstrate knowledge and ability, both analytically and practically, in facilitating and managing agroecological projects.

#### *Competence and skills*

For a Degree of Master (120 credits), the student shall

- demonstrate the ability to critically identify and independently formulate relevant questions concerning the conservation and sustainable use of agroecological systems;
- demonstrate the ability to find and critically analyze scientific literature, from both natural and social sciences;
- demonstrate relevant skills to be able to function in development work, both in cooperation and independently;
- demonstrate the ability to work with international questions in a national, regional or local perspective; and
- demonstrate the ability to combine knowledge from different disciplines in an interdisciplinary perspective.

#### *Judgement and approach*

For a Degree of Master (120 credits), the student shall

- be conscious of other values, cultures, knowledge systems, institutions and social traditions, compared to the student's own;
- demonstrate the ability to make judgements, considering relevant scientific, environmental, ethical and societal aspects; and

- promote and reflect upon the coordination of scientific knowledge with knowledge derived from practical work as well as traditional knowledge within the field of management of agroecological systems.

#### **4. Possibilities for further study**

A student who has completed the Agroecology – Master’s Programme and obtained the Degree of Master (120 credits), meet the specific entry requirements for admission to further studies, among others, the following education at SLU:

- Third-cycle studies.

The postgraduate research subjects into which entry is possible are specified in the appendix, which is approved by the Board of education on first and second cycle at the Faculty of Landscape Planning, Horticulture and Agricultural Sciences.

#### **5. Content and outline**

##### *5.1 Courses*

The courses included in the Agroecology - Master’s programme are decided on by the Educational board at the Faculty and are presented in the appendix to the education plan, which also contains a description of the course structure. The intended learning outcomes and content of the courses are described in the syllabus for each course.

##### *5.2 Structure*

The programme contains courses and a master’s thesis in Agricultural Science according to the following:

The Master’s programme in agroecology aims to create the learning environment necessary for training students in this understanding. The aspect of agroecology as an academic subject is its interdisciplinary perspective and its focus, theoretical basis and methodologies at the system level of the farm and its interactions with the system levels below (plant, soil, animals) and above (landscape, municipality, institutional frameworks, etc.). The Master’s programme in Agroecology focuses on knowledge, skills and abilities to handle such complex contexts.

All teaching will be in English.

#### **6. Examination**

Each course includes one or more examinations. Courses will in general be graded using one of the grades U, 3, 4 or 5. Grading criteria are described in a supplement to each course syllabus.

Grades will be determined by an examiner appointed by SLU. General rules and guidelines for assessment and grading are presented in internal directives for grading systems and examination rights and in regulations governing education on the first and second cycles at SLU.

## 7. Degree

### *7.1 Degree awarded after completion of the study programme*

A Degree of Master of Science (120 credits) with a major in Agricultural Science according to the education plan for Agroecology will be awarded on completion of the course requirements (passed courses) of 120 credits, according to the following:

- a maximum of 15 credits courses at first level
- a minimum of 30 credits programme courses shall concern in-depth study within Agricultural Science (A1N, A1F),
- a minimum of 30 credits shall concern independent work (degree project) within Agricultural Science (A2E)

The course requirements must at the same time fulfil the following requirements:

- a minimum of 60 credits programme courses according to the study plan established, and
- independent work (degree project) in accordance with the study plan established and with regulations for the programme.

There is additional requirement of a completed Degree of Bachelor, Professional Degree or the corresponding overseas qualification of a minimum of 180 ECTS.

The student fulfilling the examination requirements for the Degree of Master (120 credits) will be supplied with an degree certificate upon request. The degree certificate will specify the qualification as Degree of Master of Science (120 credits) with a major in Agricultural Science.

This degree certificate shall show that the degree fulfils the requirements according to the programme syllabus for the Agroecology - Master's programme. Specific course requirements are described in the programme structure, which is decided on by the Board of education on first and second cycle at the Faculty of Landscape Planning, Horticulture and Agricultural Sciences and presented in the appendix to the programme syllabus.

### *7.2 Other degrees the student may be awarded after completion of the study programme*

The courses included in the Agroecology - Master's programme also allow the following degrees to be obtained provided that the SLU requirements on general qualification are fulfilled:

- Degree of Master of Science (60 credits) with a major in Agricultural Science,
- Degree of Master of Science (120 credits) with a major in Agricultural Science.

## **8. Miscellaneous**

### *8.1 Credit transfer*

Passed courses from other institutions of higher education, in Sweden or elsewhere, may be credited for in the degree. Deduction of credits can be made if there is substantial overlap between passed courses at SLU and courses that the student wishes to transfer. Credit transfers are not applicable if there is a substantial difference between the courses.

Credit transfer requests are considered on an individual basis. Equivalent knowledge and skills acquired in an occupation may also be credited upon assessment.