



# SLUkurs

## Agroecology - Master´s Programme

**Version 1.** Is valid between autumn 2010 and spring 2012

**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

### 1. Decision

The Vice-chancellor of the Swedish University of Agricultural Sciences decided on October 5, 2009 to establish the Master's programme (Two Years) in Agroecology. The programme syllabus was decided on December 10, 2009 by the Dean of the Board of the Faculty of Landscape Planning, Horticulture and Agricultural Science to apply from the academic year 2010/11. Changes were made in the syllabus on June 9, 2010 according to the Vice-chancellor's decision on May 10, 2010. The change will apply from the academic year 2010/11.

The Agroecology programme leads to a Degree of Master (Two Years) at advanced 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 Bachelor's degree (undergraduate cycle) 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 admission requirements including English language proficiency demonstrated as:

- English B (Swedish secondary school) or equivalent.

The specific admission 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 objectives*

In accordance with the 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 objectives for a Degree of Master (Two Years)*

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 (Two Years):

##### *Knowledge and understanding*

For a Degree of Master (Two Years), 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.

#### *Skills and abilities*

For a Degree of Master (Two Years), 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.

#### *Evaluation ability and approach*

For a Degree of Master (Two Years), 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 Precise objectives for the Agroecology - Master's programme (Two Years)*

Within the framework of the objectives in the degree description, SLU has specified the following precise objectives for the Master's programme in Agroecology.

#### *Knowledge and understanding*

For a Degree of Master (Two Years), 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.

#### *Skills and abilities*

For a Degree of Master (Two Years), 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.

#### *Evaluation ability and approach*

For a Degree of Master (Two Years), 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**

The student who has completed the education in the Agroecology programme and obtained the Degree of Master (Two Years), fulfil the specific requirements to be accepted for further studies, among others, the following education at SLU:

- Education at postgraduate level.

The postgraduate research subjects into which entry is possible are given in the appendix, and have been decided by the Board for Undergraduate University Education at the Faculty.

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

### 5.1 Courses

The courses included in the Agroecology - Master's programme are decided on by the Board for University Undergraduate Education at the Faculty and are presented in the appendix to the education plan, which also contains a description of the course structure. The objectives and content of the courses are described in the course plans for the individual courses.

### 5.2 Structure

The programme contains courses and a degree project 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. The requirements for course grades are outlined in an attachment to the syllabus.

Grades will be determined by an examiner appointed by SLU. General rules and guidelines for examinations and gradings exist in internal regulations on grading system and exam rights, and in the set of rules and regulations for education at first and second cycle at SLU.

## 7. Degree

### 7.1 Degree to which the education programme leads

A Degree of Master (Two Years) of Science with a major in Agricultural Science according to the education plan for Agroecology will be awarded on completion of the course examinations (Pass grades) to the value of 120 credits, with the following requirements:

- 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)
- a maximum of 15 credits courses at first level

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 credits.

The student fulfilling the examination requirements for the Degree of Master (Two Years) will be supplied with an examination certificate upon request. The examination certificate will be associated with the title Degree of Master (Two Years) of Science with a major in Agricultural Science.

This examination certificate shall show that the degree fulfils the requirements according to the education plan for the Agroecology - Master's programme. Specific course requirements are described in the programme's study plan, which is decided on by the Board for University Undergraduate Education at the Faculty and presented in the appendix to the education plan.

#### *7.2 Other degrees to which the education programme render possible*

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

- Degree of Master (One Year) with a major in Agricultural Science,
- Degree of Master (Two Years) with a major in Agricultural Science.

## **8. Miscellaneous**

### *8.1 Eligibility*

Course credits obtained from a different higher education, inside or outside of the country, can be eligible for inclusion in the Agroecology - Master's programme. Deduction of credits can be made if there is a significant overlap between courses that are approved at SLU and the courses that the student applies to include in the degree. Eligibility cannot be made if there is an essential difference between the educations.

Eligibility will be assessed in individual cases. Subject to assessment, corresponding knowledge and skills acquired in professional activities can also be deemed eligible.