



LUND
UNIVERSITY

Faculty of Science

Master of Science in Geology

1. Details of Programme

1:1 Programme of study for the degree of Master of Science (Two Years)

Main field: Geology

Title in Swedish: Naturvetenskaplig masterexamen

Huvudområde: Geologi

1:2 Scope in higher education credits

120 higher education credits at Lund University

1:3 Cycle

Second cycle

1:4 Programme code

NAGEL

1:5 Decision details

The programme syllabus was approved by the Board of the Faculty of Science on 7 February 2007, in accordance with the Higher Education Ordinance 1993:100 (amend. 2006:1053). The syllabus comes into effect on 1 July 2007.

1:6 Amendment details

Decision by Pro-dean 31 August 2007. Valid from 1 September 2007.

Education committee 24 October 2007. Valid from 19 January 2008.

2. Programme description

The programme aims to provide students with the opportunity to acquire second-cycle theoretical and practical knowledge and competence as regards different specialisations within the field of Geology (mineralogy and petrology, tectonics and structural geology, paleoecology and paleontology, sedimentology and glacial geology, stratigraphy, geochronology and geomagnetism, as well as geochemistry and paleoclimatology). With a solid, broad base of knowledge the students shall be able to independently participate in wide ranging geoscientific analysis, as well as having specialist competence in one of Geology's fields of study. The programme shall also prepare students for third-cycle studies within the subject area.

3. Learning outcomes

Based on the learning outcomes stated in the Higher Education Ordinance 1993:100 (amend. 2006:1053) appendix 2, for a degree of Master of Science in Geology, students must

- have a solid, broad base of knowledge within large parts of the field of Geology and a platform for third-cycle studies through specialist competence in one of Geology's fields of study
- have skills and knowledge that enable immediate entry to a labour market where geological issues have a central place
- be familiar with international frontline research as regards the issues, theories and methods within a particular area of Geology
- be able to analyse and draw conclusions about complex relationships in the geobiosphere, based on geological data,
- be able to apply geological knowledge within georesource and environmentally-related issues,
- be aware of the ethical aspects of research and development work in Geology
- be able to make assessments on the basis of the scientific, societal and ethical aspects of the field of Geology
- be able to formulate a geological problem and thereafter carry out and compose a written and oral report of a survey that comprises collection, analysis, critical assessment and evaluation of both geological field data and other geological information
- have achieved good communicative competence and received comprehensive and systematic training in discussing and presenting geological conclusions and knowledge, both in orally and in writing
- have developed the ability to plan and solve tasks, both independently and in a group
- be able to take responsibility for their own knowledge development in Geology and related fields, and
- possess knowledge of and insight into issues of equality and diversity in science and in the global community.

4. Course Information

The programme has two specialisations, one in Quaternary Geology and one in Bedrock Geology (see the table below).

Quaternary Geology comprises three courses, each worth 15 higher education credits:

1. Quaternary Geology: Glacial sedimentology – processes, sediments and landform systems
2. Quaternary Geology: Paleoecological methods and environmental analysis
3. Quaternary Geology: Quaternary climate and glaciation history

Bedrock Geology comprises four courses, each worth 15 higher education credits:

1. Bedrock Geology: Evolution of the lithosphere, tectonics and planetary geology
2. Bedrock Geology: Sedimentary basins, paleoclimatology and stratigraphy

3. Bedrock Geology: Petrological and ore-forming processes
4. Bedrock Geology: Evolution of the biosphere, paleoecology and paleontology

At least three of the above courses are studied during the first year (totalling 45 higher education credits), normally within the same specialisation. The remaining 15 higher education credits can be made up from optional courses. A degree project comprising 45 higher education credits is carried out in the second year. The remaining 15 higher education credits can come from any of the above courses that were not studied during the first year, or from optional courses during any period. Taking the optional course “Research methodology, geostatistics and scientific writing” (15 higher education credits) before carrying out the degree project is recommended.

A schematic representation of the programme’s structure is provided in appendix 1.

5. Degree Requirements

The general degree requirements for the degree of Master (Two Years) are regulated in the Higher Education Ordinance 1993:100 (amend. 2006:1053) appendix 2 and in the local degree rules 18 December 2006 at Lund University.

The programme covers 120 higher education credits including a degree project of 45 higher education credits. A student who has passed the programme and who has been awarded degree of Bachelor (180 higher education credits) fulfils the requirements of the degree of Master (Two Years).

The degree title (in Swedish) is Naturvetenskaplig Masterexamen
Huvudområde: Geologi

The English translation is:
Master of Science (Two Years) in Geology

6. Admission Requirements and Selection Criteria

Admission requirements and selection criteria for admission to first-cycle higher education are regulated by the Higher Education Ordinance 1993:100 (amend. 2006:1053) and in the local admissions procedure for Lund University of 18 Dec 2006.

Requirements for admission to the programme are a first-cycle degree comprising at least 180 higher education credits in Geology or in Geoscience specialising in Geology or the equivalent, or an equivalent foreign degree with an equivalent/similar specialisation.

Additionally, the following requirements for special eligibility as regards English apply to non-Nordic students who do not have English as their mother-tongue: an internationally recognised English test, such as TOEFL (at least 550 / 213), IELTS (at least 6.0) or the Cambridge Certificate of Proficiency.

Swedish and Nordic students must fulfil the special eligibility requirement of English B from upper secondary school or the equivalent.

When selecting among eligible applicants, grades and other merits such as letters of recommendation and the applicant’s “Statement of Purpose” will be taken into account.

7. Further Information

Transitional provisions:

The Faculty Board may decide on the discontinuation of a programme or main field and may also decide, in association with this, on transitional provisions for students who have started these programmes.

Grades and examinations:

Rules pertaining to grades and examination are stated in the course syllabi approved by the Faculty Board.