Department of Physical Geography

Stockholm University

Education plan

for

Master's Programme in Geomatics with Remote Sensing and GIS
Masterprogram i geomatik med fjärranalys och GIS

120.0 Higher Education Credits
120.0 ECTS credits

Programme code:	NGFOG
Valid from:	Autumn 2022
Date of approval:	2017-06-09
Department:	Department of Physical Geography

Decision

This syllabus has been approved by the Board of the Faculty of Science at Stockholm University on 6 June 2021.

Prerequisites and special admittance requirements

To be eligible for this programme you must have knowledge corresponding to a Bachelor's degree in biology-earth sciences, geography, geology, Earth sciences, environmental sciences, physical geography, or urban and regional planning. Or Bachelor's degree in biology, including at least 15 ECTS credits in ecology. English 6 or equivalent.

Programme structure

The programme consists of a compulsory part of 45 higher education credits (HECs). The fist year consist of an optional part of 15 higher education credits. The second year consist of an degree project (30, 45 or 60 higher education credits) and an optional part of 0-30 higher education credits.

Goals

The main field of study: Physical Geography and Quaternary Geology with specialisation of Geomatics with Remote Sensing and GIS.

For a Degree of Master (two years) students must
• demonstrate knowledge and understanding in their main field of study, including both broad knowledge in the field and substantially deeper knowledge of certain parts of the field, together with deeper insight into current research and development work;
• demonstrate deeper methodological knowledge in their main field of study;
• demonstrate an ability to critically and systematically integrate knowledge and to analyse, assess and deal with complex phenomena, issues and situations, even when limited information is available;
• demonstrate an ability to critically, independently and creatively identify and formulate issues and to plan and, using appropriate methods, carry out advanced tasks within specified time limits, so as to contribute to the development of knowledge and to evaluate this work;
• demonstrate an ability to clearly present and discuss their conclusions and the knowledge and arguments behind them, in dialogue with different groups, orally and in writing, in national and international contexts;
• demonstrate the skill required to participate in research and development work or to work independently in other advanced contexts;
• demonstrate an ability to make assessments in their main field of study, taking into account relevant scientific, social and ethical aspects, and demonstrate an awareness of ethical aspects of research and development work;

• demonstrate insight into the potential and limitations of science, its role in society and people's responsibility for how it is used;
• demonstrate an ability to identify their need of further knowledge and to take responsibility for developing their knowledge.

Courses

Compulsory courses:
1. Applied Remote Sensing and GIS for Environmental Analysis, Advanced Level, 15 HECs*
2. Geographic Analysis and Visualization in GIS, Advanced Level, 15 HECs*
3. Advanced Remote Sensing, Advanced Level, 15 HECs*
4. Degree project in Physical Geography and Quaternary Geology, Advanced Level, 30, 45 or 60 HECs*

Optional courses: 15-45 HECs.

* The main field of study.

Degree

Degree of Master (two years).

Misc

Students who have been admitted to the programme but not completed it during the scheduled two years can request to complete the program even after the programme syllabus no longer applies. In such cases, the limitations stated in the course syllabus apply.

The degree project corresponds to the independent work that is required for a Master's degree, as specified by the Higher Education Ordinance.
The extent of first level (bachelor level) courses allowed within the programme is limited to a maximum of 30 higher education credits.

Regarding optional courses: limitations expressed in the course syllabi, determine if courses may be included in a master's degree.