Department of Geological Sciences

Stockholm University

Education plan

for

Master's Programme in Climate Science
Masterprogram i klimatvetenskap

120.0 Higher Education Credits
120.0 ECTS credits

Programme code:	NKLVO
Valid from:	Autumn 2018
Date of approval:	2017-12-06
Department:	Department of Geological Sciences

Decision

This programme syllabus has been approved by the Board of the Faculty of Science at Stockholm University.

Prerequisites and special admittance requirements

To be admitted to the programme, knowledge equivalent to a Bachelor's degree in Meteorology, Geoscience, Geology, Physical Geography, Chemistry, Physics, Biology, Mathematics, Environmental Science or Biogeoscience is required, including at least 15 higher education credits in mathematics. Also required is knowledge equivalent to Swedish upper secondary course English B or equivalent to one of the following tests; Cambridge CPE and CAE: Pass, IELTS: 6.0 (with no part of the test below 5.0), TOEFL (paper based): 550 (with minimum grade 4 on the written test part), TOEFL (computer based): 213, TOEFL (internet based): 79.

Programme structure

The programme consists of a compulsory part of 60 higher education credits (HECs), a degree project of 30 or 45 higher education credits, and an elective part of 15 or 30 higher education credits, depending on the size of the degree project.

Goals

For a Degree of Master (Two Years) in Climate Science, 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; and - 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; and - 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; and - demonstrate an ability to identify their need of further knowledge and to take responsibility for developing their knowledge.

Courses

Compulsory courses (60 HECs):
Social-Ecological Resilience for Sustainable Development (15 HECs)
Climate Change Throughout Earth's History (15 HECs)
Global Climate System (15 HECs)
Climate and Landscape (15 HECs)

Independent Project in Climate Science (30 or 45 HECs)

Elective courses (15-30 HECs)

The optional courses are decided by the department board. The list of all optional courses should be updated before each new academic year. All courses are in Climate Science.

Degree

Degree of Master (2 Years)

Misc

Students who have been admitted to the programme but not completed it during the scheduled two/three 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 following departments are involved in the programme:
Department of Physical Geography
Department of Meteorology
Department of Biological Education
Department of Environmental Science and Analytical Chemistry