

Education plan

for

**Master's Programme in Environmental Science - Atmosphere,
Biogeochemistry and Climate**
Masterprogram i miljövetenskap - atmosfär, biogeokemi och klimat

**120.0 Higher Education
Credits**
120.0 ECTS credits

Programme code: NABCO
Valid from: Autumn 2019
Date of approval: 2018-09-12
Department: Department of Environmental Science

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 the Natural Sciences, Mathematics or Engineering is required, including at least 15 higher education credits in Mathematic. 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 30 higher education credits (HECs), an elective part of 30 higher education credits, an optional part of 30 higher education credits and a degree project of 30, 45, or 60 higher education credits.

Goals

For a Degree of Master in Environmental Science (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; 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:

MI7014 Large Scale Challenges to the Climate and the Environment

MI7016 Atmosphere, Biogeosphere and Climate Change

Degree project of 30, 45, or 60 higher education credits.

Elective courses:

30, higher education credits.

The elective courses are decided by the department board. The list of all optional courses should be updated before each new academic year. Before the start of a programme, there should be a list of the minimum number of courses where teaching is guaranteed during the programme.

Optional courses: 0-30 higher education credits.

Degree

This programme leads to a Master of Science focusing on Atmosphere, Biogeochemistry, and Climate

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.