



Stockholms
universitet

Institutionen för geologiska vetenskaper

Elective courses within the Bsc and Msc programme 2020-2021

Approved by the Department Board 2020-06-02

This list presents elective courses within each program, which are given by the Department of Geological Sciences and the Department of Natural Geography (for our joint programs in geosciences). For the Master's program in climate science, courses are given from the Department of Geological Sciences, the Department of Natural Geography, the Department of Environmental Science and Analytical Chemistry and the Department of Meteorology

NGGCK, Bachelor programme in Geology, geochemistry and geophysics, 180 credits

- GG4028 Introduction to geomicrobiology, 7,5 hp
- GG4215 Organic geochemistry, 7,5 hp
- GG4216 Paleooceanography and marine geology, 7,5 hp
- GG5125 Marine geophysics, 7,5 hp
- GG5122 Petrogenesis and tectonics, 15 hp
- GG5131 Research traineeship in geological sciences I, 7,5 hp
- GG5132 Research traineeship in geological sciences II, 7,5 hp

NGEVK, Bachelor programme in earth science, 180 hp

- GG5131 Research traineeship in geological sciences I, 7,5 hp
- GG5132 Research traineeship in geological II, 7,5 hp
- GG4206 Geochemistry in the field and laboratory, 7,5 hp
- GG4208 Sedimentary systems, 7,5 hp
- GG4210 Digital processing of marine geophysical data, 7,5 hp
- GG4212 Igneous and metamorphic petrology, 7.5 hp
- GG4214 Geochemical modelling, 7,5 hp
- GG4028 Introduction to geomicrobiology, 7,5 hp
- GG4215 Organic geochemistry, 7,5 hp
- GG4216 Paleooceanography and marine geology, 7,5 hp
- GG5125 Marine geophysics, 7,5 hp

At the Department of physical geography

- GE2012 Environmental protection and management, 15 hp
- GE4025 Statistical methods in geoscience, 7,5 hp
- GE4028 Project in physical geography, 7,5 hp
- GE5003 Glaciers and high mountain environments, 7,5 hp
- GE5029 Hydrology and water resources, 7,5 hp
- GE5030 Field methods in physical geography and quaternary geology, 7,5 hp
- GE5033 Geomorphological processes, natural hazards and risk assessments, 15 hp
- GE5034 Climate and society, 15 hp
- GE5007 Traineeship in quaternary geology, 7,5 hp
- GE5039 Traineeship in quaternary geology, 15 hp
- GE5008 Traineeship in quaternary geology, 7,5 hp
- GE5038 Traineeship in quaternary geology, 15 hp

NGDIK, Bachelor programme in earth science, distance learning, 180 hp

- GG4140 Mineralogy, 7,5 hp
- GG4142 Igneous petrology, 7,5 hp
- GG4143 Metamorphic petrology, 7,5 hp
- GG4144 Sediment petrology, 7,5 hp
- GG4147 Tectonics, 7,5 hp

GG4150 Petrogenesis, 7,5 hp
GG5014 Geology of Sweden 7,5 hp
GG5106 Structural geology, 7,5 hp
GG5123 Critical steps in the evolution of earth and life 7,5 hp
GG5124 Paleoclimatology and the ocean system 7,5hp
GG5126 Marine petrophysics7,5 hp
GG5125 Marine geophysics7,5 hp
GG5119 Ore forming processes 7,5 hp
GG2012 Geochemistry 7,5 hp
GG4215 Organic geochemistry 7,5 hp

At the Department of physical geography

GE3019 Cartography and map design15 hp (ges på svenska)
GE4030 Geographic information systems (GIS)7,5 hp
GE4031 Geomorphological processes7,5 hp
GE4032 Climate variability7,5 hp

NMGEO, Masterprogramme in geological sciences, 120 hp

GG8116 Geodynamics 7.5 hp
GG8020 Applied geology 7.5 hp
GG7008 The ocean's role in the climate system on geological time scales 7.5 hp
GG7020 Applied environmental geochemistry 7,5 hp
GG7022 Paleoclimatology, 7,5 hp
GG7023 Palaeontology 7,5 hp
GG7024 Marine geotechnics7,5 hp
GG7025 Terrestrial geophysics 7,5 hp
GG8021 Climate change throughout earth's history 15 hp
GG8019 Isotope geology 7,5 hp
GG8117 Ore geology 7,5 hp
GG8051 Traineeship in geological sciences 7,5 hp
GG8052 Traineeship in geological sciences 15 hp

NKLVO Master programme in climate science 120 hp

At the Department of geological sciences

GG7007 The Geoscientific Method, 7.5 hp
GG7008 The ocean's role in the climate system on geological timescales, 7.5 hp
GG7022 Paleoclimatology, 7.5 hp
GG8021 Climate Change throughout Earth's History, 15 hp

At the Department of physical geography

GE7079 Polar and Alpine Environments and Climate Change, 15 hp
GE7022 Applied Environmental Modelling, 15 hp
GE7025 Local to Global Water Vulnerability and Resilience, 15 hp
GE7073 Methods in Physical Geography and Quaternary Geology, 15 hp
GE7063 Global Climate and Environmental Politics, 15 hp
GE7076 Quaternary Climate and Environmental Reconstructions, 15 hp
GE7051 Permafrost - Interactions with Ecosystems and Hydrology, 7.5 hp
GE7052 Glaciology, 7.5 hp
GE7084 International Environmental Management, 15 hp
GE7077 Climate Model Simulations, 7.5 hp
GE7053 Paleoglaciology, 7.5 hp

At the Department of environmental science

MI7014 Large-Scale Challenges to Climate and Environment, 15 hp
MI7016 Atmosphere, Biogeosphere and Climate Change 15 hp
MI7007 Air Quality Indoors and Outdoors, 15 hp

MI7021 Aerosols, Clouds and Climate, 15 hp
MI7015 Toxicology for Environmental Scientists, 7.5 hp

At the Department of meteorology

MO7003 Global Climate System, 15 hp
M07014 Biogeochemical Cycles, 15 hp
MO8009 Geophysical fluid dynamics, 7.5 hp
MO8007 Numerical methods in atmospheric science and oceanography, 7.5 hp
MO8013 Physical oceanography, 7.5 hp
MO8011 Cloud micro- and macrophysics, 7.5 hp

At the Department of biology education

BL8049 Systems Theory and Resilience Thinking, 15 hp
BL7041 Introduction to Sustainability Science, 7.5 hp
BL7050 Baltic Sea Ecosystem: Applications, Modeling and Management, 15 hp
BL7051 Green Biotechnology, 15 hp
BL8001 Biodiversity: Patterns and Processes, 7.5 hp
BL7053 Ecological and evolutionary responses to climatic variation, 15 hp
BL7018 Management of Aquatic Resources in the Tropics, 15 hp
BL7042 Interactions in Ecological Communities, 15 hp
BL7028 Social-Ecological Systems: Challenges and Approaches, 15 hp

At the Department of materials and environmental chemistry

KZ7002 Chemical modelling, 7.5 hp
KA7002 Analytical Chemistry, Chemometrics, 15 hp
KA7005 Analytical Chemistry, Bioanalytical Chemistry, 15 hp

At Stockholm Resilience Centre

At the Department of economics

EC7104 The Climate and the economy 7.5 hp