MSC IN GEOTECHNICS AND GEOHAZARDS (MSGEOTECH)

1. TBA …: Geotechnical Specialization Project

Supervisors: Programme staff and external supervisors
Weekly hours: 12 = 7.5 ECTS credits
Time: Autumn, Semester III
Exam: Project Report / presentation

Objectives:
The project will give the student an in-depth knowledge and competence within a selected area of the field. The project will improve the ability to do independent engineering/research work, and provide training in planning of projects, systematic processing of information and report writing

Prerequisites: Exams in the courses taught in the first and second semesters of the Programme.

Contents:
The specialization project represents 7.5 ECTS credits. It should include problems related to research and development within the geotechnics and/or geohazards areas. Whenever possible, the project should be linked to local problems and challenges, and preferably have a local contact person and/or supervisor to the project. The project may comprise theoretical, numerical, empirical, experimental or field studies. If possible, fieldwork should be included. The specialization project will normally be a starting point for the thesis work in the following semester.

Teaching methods: Supervised project work

Type of examination: Report and oral presentation.

2. TBA …: Geotechnical Specialization Course

Coordinator: Amanuensis Arnfinn Johannes Emdal
Weekly hours: 12 = 7.5 ECTS credits
Time: Autumn, Semester III – Teaching time and location will be announced on the web
Exam/Grading: Will be arranged by the respective lecturers; compulsory assignments; letter grade
Objectives: To provide students with an in-depth and advanced knowledge in selected specific areas of geotechnical engineering and geohazards.
Prerequisites: Exams in the courses taught in the first and second semesters of the Programme.

Contents:
Students will be required to choose at least two out of the following four modules under this category: 1. Advanced field- and laboratory soil testing, 2. Elastoplasticity of soils, 3. Marine geotechnical engineering, and 4. Rock fall and snow avalanche. Each module will be allocated 6 weekly hours, equivalent to 3.75 ECTS credits. At least two modules are required, equivalent to 7.5 ECTS credits.

Teaching methods: Lectures, laboratory and fieldworks and project works performed individually or in groups, led by the respective course lecturers.
Type of examination: Will be arranged by the respective module lecturers

3. TBA …: Elective Course

Weekly hours: 12 = 7.5 ECTS credits

Contents: Any course can be chosen from NTNU courses catalogue, provided it is offered in the respective semester. However, this opportunity is provided to enable students to get relevant knowledge to support their specialization projects and master theses. Students are therefore advised to consult their supervisors before choosing.