

| Module Nr. | Credits | Workload | Semester | Frequency | Duration |
|--|---------|----------|---------------------|-------------------|-------------------|
| SE-O-4 | 3 CP | 90 h | 3 | Yearly (WS) | 1 Semester |
| Courses | | | Contact time | Self-study | Group size |
| Practical Soil Mechanics | | | 2 h/week | 60 h | --- |
| Practical Soil Mechanics | | | | | |
| Learning outcomes | | | | | |
| After successfully completing the modules, the students can | | | | | |
| <ul style="list-style-type: none"> • develop strategies for the experimental investigation of practical geotechnical problems, • analyze the results of the experimental investigation. | | | | | |
| Content | | | | | |
| Different measuring methods used in geotechnical laboratory and field tests are presented. The structure of a measuring chain is explained. Selected laboratory and field tests will be performed and analyzed by the students (including discussion / interpretation of the test results): | | | | | |
| <ul style="list-style-type: none"> • Soil classification tests (water content, grain size distribution, Atterberg limits (plasticity properties), maximum and minimum density, particle density), • Determination of shear strength parameters (direct shear test, triaxial test), • Determination of compressibility of soils (oedometer test) | | | | | |
| Teaching methods / Language | | | | | |
| Laboratory practical work (block courses, dates will be announced at beginning of the course), Beamer presentations, one-to-one and small groups discussions / English. | | | | | |
| Modes of assessment | | | | | |
| Final written exam (90 minutes) | | | | | |
| Exercises (protocols and analysis of performed tests). (Deadlines will be announced at the beginning of the course) | | | | | |
| Requirements for the award of credit points | | | | | |
| Passed final module examination: written examination | | | | | |
| Exercises (protocols and analysis of performed tests) | | | | | |
| Attendance during classes. | | | | | |
| Module applicability (in other study programs) | | | | | |
| - | | | | | |
| Weight of the mark for the final score | | | | | |
| 2.5 % | | | | | |
| Module coordinator and lecturer(s) | | | | | |
| Prof. Dr.-Ing. habil. T. Wichtmann (coordinator) | | | | | |
| Dr.-Ing. W. Baille, W. Lieske, M.Sc. | | | | | |

Other information

Prerequisite for participation: Recommended previous knowledge: Completed module in Computational Methods-1 (Soil behaviour and simple constitutive models for soils).