

Foundations 1

Subject area: Civil Engineering/Architecture

University:	CTU
Level:	BA4, MA all years
Teaching mode:	hybrid: some students participate online, other students attend real-life
Instructor(s):	Jan Zalesky

Short description

Basic design methods for shallow footings, piles, retaining structures, foundation pits, sheet pile walls, anchors and soil improvement. Principles of monitoring in foundation engineering. Use of Eurocode 7. Selected case histories.

Full description

<https://portal.fsv.cvut.cz/plany/verze4/stpredmet.php?Detail=135FS01&Jazyk=EN>

Learning outcomes

Get acquainted with basic design methods in foundation design and critical thinking with respect to different site conditions, effects of underground water and pore pressure acting on retaining structures, geotechnical monitoring as a tool for safe construction processes and verification of foundation design in real scale and conditions

Recommended in particular for students of the following study programmes

Structural and Transportation Engineering, Civil Engineering, Civil Engineering + Architecture

General information

Contact hours per week:	6
Total workload:	175 (in student hours for the whole course)
ECTS credits:	7
Language:	English

Course start date:	20 February 2023
Course end date:	28 May 2023
Add. info about start date:	Start course date refers to starting date of spring semester at CTU. Schedule will be available 1 or 2 weeks before semester starts.
Weekly teaching day/time:	
Time zone:	CET (Denmark, Germany, France, Netherlands, Switzerland, Czech Republic)
Further information:	Lectures in pdf sent to students in advance
Prerequisites:	Geology, Soil Mechanics
Activities and methods:	Lectures, Seminars, Exercises
Presence on campus:	

Final examination

Form:	written
Date:	
Location/format:	
Re-sit possibility:	
Transcript available:	end of semester
Add. info/requirements:	Test with model examples to solve

Registration

To register for this course, follow the registration requirements of your **home university** as specified here: www.euroteq.eu/courses-registration.

Administration

Number of places:	20
Minimum participants:	8
Internal course code:	135FS01
Contact:	zalesky@fsv.cvut.cz

This course is part of the EuroTeQ Engineering University joint course catalogue 2023. This is a collaborative activity of the partner universities DTU, L'X, TU/e, TalTech, CTU, TUM as well as Technion. Students from these universities can participate in the offered courses. It is the responsibility of the student to check if you fulfil the requirements to participate in a specific course. Students are also advised to check with their home institution how to get recognition of the ECTS credits gained in courses of the EuroTeQ course catalogue. For further information about EuroTeQ Engineering University, visit www.euroteq.eu or get in touch with the above-mentioned point of contact.