



Civil Engineering BSc Study Abroad Course List

Tuition-fee/credit: 120 USD

For course syllabi, please contact the Study Abroad Office!

Courses without prerequisites:

Course title	Semester	Credits (ECTS)
Engineering Mathematics 1.	Fall	4
Materials Science	Fall	2
Enterprises and Labour Market	Fall	3
Mechanics 1. (Statics)	Fall	5
Technical Drawing 1.	Fall	4
Project Management 1.	Fall	3
Hydrology	Fall	2

Courses with prerequisites for students majoring in Civil Engineering BSc:

Course title	Semester	Credits (ECTS)
Geographic Information Systems 1.	Fall	2
Public Utilities	Fall	2

Detailed information about the courses:

**Engineering Mathematics 1.**

Language of instruction:	English
Form of teaching:	lecture, practice
Class hours per week:	2 L, 2 P
Credits (ECTS):	4
Course description:	This lecture and practical based course aims to give students a solid mathematics basis through covering the following topics: sets of numbers (natural, integer, rational, real and complex numbers); vectors and operations with vectors, scalar and vector products and their applications; sets and operations with sets; matrix and determinant, solving linear equation systems definition of functions.
Assessment methods:	Examination grade
Semester:	Fall Semester

Materials Science

Language of instruction:	English
Form of teaching:	lecture
Class hours per week:	2 L
Credits (ECTS):	2
Course description:	The course provides basic knowledge about the materials structure on different, macroscopic, mesoscopic and atomic levels, destructive and non-destructive methods of studying materials. The course topics starts from the smallest entities of the material, and builds up the macroscopic objects step by step, with emphasis on how the construction materials are composed. Several novel technologies and materials are also be studied.
Assessment methods:	Semester mark
Semester:	Fall Semester

Enterprises and Labour Market

Language of instruction:	English
Form of teaching:	lecture
Class hours per week:	2 L
Credits (ECTS):	3
Course description:	The purpose of the class is to introduce the adaptability of the connection between enterprises and engineering. The most important connections between engineering innovation and organizational management and integration within labour market. Challenges and opportunities related with the a fore mentioned topics. The course focuses on the role of companies and enterprises in economy.



Assessment methods:	Semester mark
Semester:	Fall Semester

Mechanics 1. (Statics)

Language of instruction:	English
Form of teaching:	lecture, practice
Class hours per week:	1 L, 3 P
Credits (ECTS):	5
Course description:	This course aims at teaching the basics of mechanics and covers the following topics: equilibrium states and conditions of equilibrium; resultant and balance of plane force systems; defining loadbearing structures, their types and loads.
Assessment methods:	Examination grade
Semester:	Fall Semester

Technical Drawing 1.

Language of instruction:	English
Form of teaching:	Lecture, practice
Class hours per week:	2 L, 2 P
Credits (ECTS):	4
Course description:	The objective of this subject is to teach students the fundamentals of descriptive geometry, giving them practical skills through the following topics; characteristics of science, geometrical construction, theoretical sciences, basics of symbolic logic, geometrical transformation, projection representation, simple statements, representation of space structures, relations, the Monge system, universal existence, the fit, section, distance and angle of space structures.
Assessment methods:	Semester mark
Semester:	Fall Semester

Project Management 1.

Language of instruction:	English
Form of teaching:	Lecture
Class hours per week:	2 L
Credits (ECTS):	3
Course description:	The comprehensive introduction of project management and enterprise management mainly in the field of engineering. The terminology of the enterprises, study of its external and internal environment. The creation



	of company strategy and its role. The appearance of innovation in different projects. The course focuses on the role of construction companies and enterprises in economy.
Assessment methods:	Examination grade
Semester:	Fall Semester

Assessment methods:	Examination grade
Semester:	Fall Semester

Hydrology

Language of instruction:	English
Form of teaching:	lecture, practice
Class hours per week:	1 L , 1 P
Credits (ECTS):	2
Course description:	This is an introductory course on the elements of the hydrologic cycle. The following physical processes and principles are described: the water balance equation, precipitation and its measurements, areal averages, interception, infiltration, evaporation, runoff, unit hydrograph theory, river morphology, hydrology of lakes, groundwater.
Assessment methods:	Examination grade
Semester:	Fall Semester