

Questionnaire

Training Organisation	Colorado School of Mines
Country	United States
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Courses offered

Programme ¹	Course ²	Semester	Type ³	Hrs ⁴	CP ⁵	Syllabus ⁶
Other	Engineering Geology & Geotechnics	Fall	C	6	4	Earthquake engineering, slope stability analysis, engineering geology for dam design, geological aspects of tunneling
Other	Underground Construction Engineering Laboratory	Fall/Spring	C	1.5	1	Testing of geomaterials, geological mapping for tunnel site investigation, numerical modeling for tunneling, soil conditioning, slurries, hard rock cutting
Other	Advanced Geomaterial Mechanics	Fall	C	4	4	Stress-strain behavior of soil and rock, shear strain of soil and rock for design, engineering property evaluation of geomaterials, concrete design and evaluation
Other	Underground Construction Engineering in Hard Rock	Spring	C	3	3	Impacts of subsurface conditions on hard rock tunneling, tunneling equipment, TBM performance prediction, tunnel stability assessment
Other	Underground Construction Engineering in Soft Ground	Spring	C	4	4	Analysis of temporary and permanent structural support, characterization of stress and deformation fields around shallow excavations, analysis and design of groundwater control systems, surface deformation analysis
Other	Construction Engineering and Management	Spring	C	3	3	Project life cycles, project delivery systems cost estimating, scheduling, standard contracts, dispute resolution

Remarks:

All courses listed above are offered for the M.Sc. and Ph.D. programs in Underground Construction and Tunnel Engineering (UCTE). In addition to the core courses listed above, several elective courses relevant

¹ Please enter: B-CE for Bachelor programme in Civil Engineering
 M-CE for Master programme in Civil Engineering
 B-ME for Bachelor programme in Mining Engineering
 M-ME for Master programme in Mining Engineering
 MAS for Master of advanced studies
 other for other programmes (please explain under „Remarks“ beneath the table)

² For example: „Tunnelling II“, „Design thesis“, „Mechanized tunnelling“

³ Please enter „C“ (compulsory) or „E“ („elective“)

⁴ Please enter number of teaching hours/week for lectures and exercises

⁵ Please enter number of ECTS credit points (1 credit point = 30 hours student workload incl. homework)

⁶ Please enter an outline/summary of the topics covered in the course. Use one table-cell per course but with as many rows as needed.

ITA-CET
Committee on Education and Training
Activity Group 3: „University network“

to the UCTE degree are available through the Civil, Geological, and Mining Engineering programs on campus. Please see http://uct.mines.edu/edu_graduate.html for more information.