SYLLABUS

Open Pit and Underground Mining 7.5 credits T7008B

Brytningsmetoder

Course syllabus admitted: Autumn 2023 Sp 1 - Present

DECISION DATE
2021-02-17

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Open Pit and Underground Mining 7.5 credits T7008B

Brytningsmetoder

Second cycle, T7008B

Education level	Grade scale	Subject	Subject group (SCB)
Second cycle	G U 3 4 5	Berg- och mineralteknik	Mining and Mineral Technology

Main field of study

Civil Engineering

Entry requirements

T0013B Rock Engineering and Rock Mechanics or equivalent knowledge.

Selection

The selection is based on 30-285 credits

Course Aim

Mining Method course is included in the LTU Master's program and provides students with the knowledge of different mining methods. Intended Learning Outcomes (ILOs) are:

1. Apply your knowledge of geologic, geotechnical, and orebody-related parameters in conjunction with known production demands and economic requirements to determine the appropriate mining method for a given orebody.
2. Select suitable mining equipment for a given method and production demand.
3. Develop an understanding of the basic surface and underground mine designs.
4. Identify aspects of mine safety.
5. Analyse the basic mining investment projects.

Contents

This course covers:
- Mining methods: basic theory, selection assessment,
- Mining equipment selection assessment: based on examples,
- Introduction to mine design: surface and underground design,
- Aspects of mine safety,
- Basic mining investment projects analysis.

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Realization

Each course occasion´s language and form is stated and appear on the course page on Luleå University of Technology's website.
This course will consist of the following Teaching and Learning Activities (TLAs) with relation to Intended Learning Outcomes 1-5:

Lectures:
- Interactive and classroom lectures,
- Videos and different case study scenarios will be shown and followed by class discussion,
- Guest lectures from an industry,
- Tutorial exercises.

Assignments
- Individual/Group projects,
- Group discussions – discussion on various aspects of the assigned topic.

Final Exam

All activities are mandatory

Examination

If there is a decision on special educational support, in accordance with the Guideline Student's rights and obligations at Luleå University of Technology, an adapted or alternative form of examination can be provided.

Written assignments and exam with differentiated grades, F, 3, 4, 5.

Unauthorized aids during exams and assessments

If a student, by using unauthorized aids, tries to mislead during an exam or when a study performance is to be assessed, disciplinary measures may be taken. The term “unauthorized aids” refers to aids that the teacher has not previously specified as permissible aids and that may assist in solving the examination task. This means that all aids not specified as permissible are prohibited. The Swedish version has interpretative precedence in the event of a conflict.

Overlap

The course T7008B is equal to ABT051, ABT013

Course offered by

Department of Civil, Environmental and Natural Resources Engineering

Modules

Code	Description	Grade scale	Cr	Status	From period	Title
0001	Written exam	G U 3 4 5	4.5	Mandatory	A07	
0002	Assignments and group project	U G#	3	Mandatory	A07	

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Study guidance

Study guidance for the course is to be found in our learning platform Canvas before the course starts. Students applying for single subject courses get more information in the Welcome letter. You will find the learning platform via My LTU.

Last revised

by Assistant Director of Undergraduate Studies Eva Gunneriusson, Department of Civil, Environmental and Natural Resources Engineering 2021-02-17

Syllabus established

The plan is established by the Department of Civil and Environmental Engineering 2007-01-31 and is valid from H07.