

Benefits of the Modular Study Structure



Take advantage of the many benefits of a Master's programme with a modular structure:

- Individual Design
Choose from a wide range of modules relevant to you to advance your career.
- Step-by-Step Qualification
Earn recognised (intermediate) degrees (MC, CAS, DAS) that document your progress and expand your qualifications.
- Direct Application
Immediately apply the knowledge you have gained in practice and benefit directly from new competencies.

Obtain a **Master's degree** and/or **Certificates** from Austria's leading technical universities, which are recognised and valued by employers worldwide.

Spring 2025
Start of the first Microcredentials and Certificate of Advanced Studies.

Language of Instruction
Optional: German and/or English.

Facts

Participation Fees
1.500 Euro

Degree
Graduates will receive one of the following degrees depending on the chosen format: MC, CAS, DAS, AE, or MSc (CE).

Registration and further information
www.natm.at

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Joint NATM Master of Science

Construction, Rehabilitation and Operation of NATM- & TBM-Tunnels

> Joint NATM Master of Science



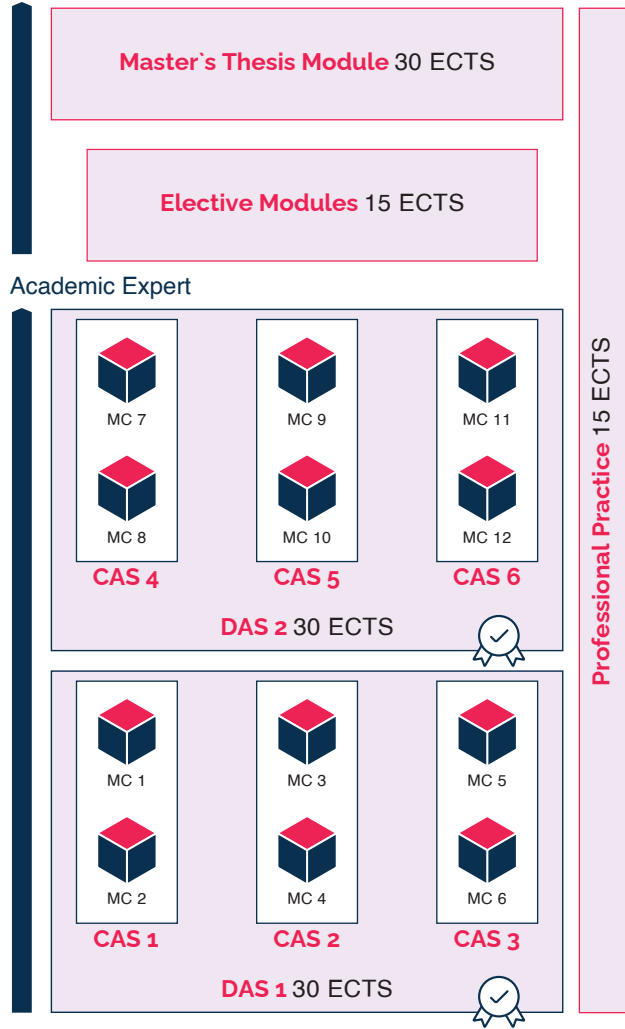
NEW
Master with Integrated Certificates



Jointly developed and implemented by TU Graz and Montanuniversität Leoben



MSc (CE)



Content

CAS 1

MC 1: Investigation / Exploration Concepts and Parameter Evaluation

MC 2: Geological, Geotechnical and Numerical Models

CAS 2

MC 3: NATM- and TBM-Technologies

MC 4: Tunnel Design Methods

CAS 3

MC 5: Ground Modelling

MC 6: Excavation and Support Techniques incl. Practical Work

CAS 4

MC 7: Data Science and Machine Learning in Geotechnical Applications

MC 8: BIM in Tunnelling

CAS 5

MC 9: Special Construction Methods Related to Underground Infrastructure

MC 10: Health and Safety in Construction and Operation incl. Risk Assessment

CAS 6

MC 11: Cost Determination, Contracts and Site Management

MC 12: Maintenance and Refurbishment of Underground Infrastructures incl. M&E

Elective Modules

Exploration

Design and Construction of Underground

Numerical Methods in Geotechnics

Numerical Methods in Rock Mechanics

Advanced Rock Mechanics and Tunnelling

Sustainability in Subsurface Engineering

Master's Thesis Module

Writing a Master's thesis is mandatory in the Master's programme.

Choose from the following formats or combine them according to your needs:

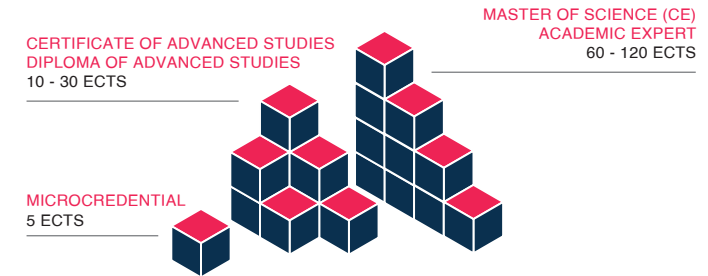
– Microcredential, MC (5 ECTS)

– Certificate of Advanced Studies, CAS (10 ECTS)

– Diploma of Advanced Studies, DAS (30 ECTS)

– Academic Expert, AE (60 ECTS)

– Master of Science (Continuing Education), MSc (CE) (120 ECTS)



Admission Requirements

There are no specific admission requirements for our Microcredentials, CAS and DAS programmes – they are open to everyone interested.

To be admitted to the Master's programme, a Bachelor's degree or completion of another study programme comprising 180 ECTS is required.