



Sustainable Mines of the Future Summer School Invitation

8-10 July 2024 in Aachen (Germany)
Module 3 and 4



Day 1: Mining and Energy Transition

Provided by **Prof. Bernd Lottermoser**
RWTH Aachen University

8 July 2024



Day 2: Tomorrow's Mine – safe and automatic

Provided by **Prof. Nikolaus Sifferlinger**
Montanuniversität Leoben

9 July 2024



Day 3: Visit of an Opencast Mine

Field trip

10 July 2024

Programme

Day 1 – Mining and Energy Transition (provided by RWTH Aachen University)

- Lectures
 - Mineral raw materials for the energy transition
 - Energy consumption in mining
 - Renewables for mining
- Case Study: Energy systems for mine sites (work in groups)

Day 2 – Tomorrow's Mine – safe and automatic (provided by Montanuniversität Leoben)

- Risk management – Hazards in mining – Sources of accident reports
- Proximity detection in NO-GO Zones
- Emerging role of robots in mining
- Challenges of mechanical cutting in hard rock mining

Day 3 – Visit of an Opencast Mine

- Tour through an opencast mine with industry experts
- Experience energy intensive processes in practice
- See the integration of renewable energies on mine sites in practice

Details on the Registration and the Module

Registration

- Bachelor's and Master's students interested in environment, energy and resources
- Maximum of 40 participants
- Register via <https://forms.gle/XjD6gKjCGMdq9Ckv7>
- Registration opens on 22 May 2024
- Deadline for registration: 21 June 2024 (by midnight 23:59)

Formal aspects

- Credits: 1 ECTS corresponding to 25h of effort
- Lectures, exercises, and excursion take place in presence
- TERRA Summer School is free of charge!

Further Information

- Contact:
emc@mre.rwth-aachen.de
- Find out more about educational opportunities:
<https://femp.org/database-courses/#summerschool>
- The TERRA Summer School is part of the TERRA initiative:
https://mre.rwth-aachen.de/en/research/projects/terra/?noredirect=en_US