

Programme Structure

RaVeN is a two-year Mining Engineering Master's programme

YEAR 1

1st SEMESTER (31 ECTS)

AGH University of Science and Technology

Teaching the necessary fundamental skills in topics areas such as geology and innovative mining, supported by economic, social and environmental courses.

2nd SEMESTER (29 ECTS)

AGH University of Science and Technology

In semester two, AGH University's Faculty of Non-ferrous Metals expands on the knowledge gained during semester one and provides students with a more advanced understanding of metallurgical processing with sustainability in mind.

YEAR 2

3rd SEMESTER (33 ECTS)

Freiberg University of Mining and Technology

During Semester three at TUBAF, students have the opportunity to gain an in-depth and comprehensive understanding of environmental issues, recycling and circularity.

4th SEMESTER (27 ECTS)

AGH University of Science and Technology

Semester four at AGH University is a graduate semester, focused on preparing a master's thesis in close collaboration with an industrial partner or research center, which will also host students for an internship.

Today's Europe needs a skilled workforce for the raw materials industry, which forms the basis for the development of innovative technologies and industries of the future. The large imbalance between raw material acquisition and consumption that exists in Europe requires a greater commitment to securing supply chains. Such a strategy demands the acquisition of a skilled, entrepreneurial workforce with an awareness of sustainable activities between technology, economics, society and the environment.

The RaVeN EIT-Labelled master's programme in Mining Engineering responds to this challenge by offering an innovative education programme which offers a comprehensive approach to resources with an emphasis on a holistic value chain and on closing the gap between the supply of, and demand for, raw materials. The objective will be pursued along an active learning path involving students and looking for unconventional solutions that can get us closer to a more self-contained (natural resource re-circulating) and, therefore, more sustainable economy. The three cooperating university partners, representing a broad geographical and cultural spectrum, collaborating with the two sides of the Knowledge Triangle, contribute a combination of expertise and highly entrepreneurial mindsets to the programme.

Supported by



Co-funded by the
European Union



Raw
Materials
Value
Chain | RaVeN

MSc in Mining Engineering

Awarded the EIT Label in 2022



DOUBLE DIPLOMA

Graduates will be awarded diplomas from:

- 1) at AGH UST – magister inżynier;
- 2) at TUBAF – Master of Science.

Graduates will also be awarded the EIT Label Certificate.

CREDITS

120 ECTS, 24 months.

LANGUAGE

English.

START DATE

October 2025.

REQUIREMENTS

- ♦ Bachelor's degree in: Geology, Mining Engineering, Mineral Processing, Environmental Engineering, Mechanical Engineering, Metallurgy or similar. Students holding a bachelor's degree in other field can be selected by the decision of the Program Council.
- ♦ English certificate welcome. If unavailable, it can be obtained in Poland while studying for around €70.

TUITION FEES

- ♦ AGH – not applicable (excluding the recruitment fee – a registration fee of 100 PLN will apply to all students).
- ♦ TUBAF – not applicable (excluding the „Semester Fee“ of 94€/per semester which is applied to all students at TUBAF) (a semester fee of 300€/semester applies for applicants who already hold a master's degree).

APPLICATION

2 June – 5 September 2025.

SCHOLARSHIPS

AVSA scholarships of €13,500 from EIT RawMaterials. For students who will not be funded by AVSA, national ministerial scholarships can be provided. Additionally, the best students can be awarded academic scholarships for the highest academic achievements.

Please refer to the ravenmaster.eu website for information on available scholarships and how to receive them.

PROFESSIONAL PROFILES AFTER GRADUATION

The RaVeN master's degree programme will prepare students with the hard and soft skills needed to understand and solve complex problems related to the entire raw materials value chain.

The training and knowledge offered by the programme will offer an advantage for future professionals in the sector, as it focuses on key steps of the value chain that are lacking in the current education portfolio in Europe. The programme is designed to prepare students with up-to-date specialised practical knowledge on the sustainable exploitation of raw materials throughout the value chain: sourcing, processing, use, recycling, and back to sourcing.

In addition, the RaVeN MSc fosters creativity, innovation and entrepreneurship, preparing graduates to implement innovative solutions at their workplaces, or to start and run their businesses successfully. Through the programme, students will become technical experts in the field of raw materials, being aware of sustainability, and gaining a holistic view of the value chain and processes.

Graduates' skills and knowledge will be highly valued in the mining and processing, metallurgy, energy, automotive and logistics sectors.



Participating universities



Industry involvement



ARE YOU A STUDENT WHO IS:

- ♦ Wanting to contribute to securing raw materials supply?
- ♦ Keen to gain expertise over the entire raw materials value chain?
- ♦ Motivated to acquire entrepreneurship skills and start your own business?
- ♦ Willing to support and contribute to the design of products and services for the circular economy?

Apply now!

ravenmaster.eu

