



Montanuniversität
Leoben

MASTER OF SCIENCE IN

Materials Science

Do you want to drive future progress?

Without materials, there is no technological progress, as they are essential to modern electronics, enhancing performance of smartphones, computers, and networks while driving digitalisation forward. That's why the master's degree programme Material Science provides you with expertise to further advance materials like metals, ceramics, or semiconductors.

In our programme you will gain theoretical and practical knowledge to create materials with improvements in energy efficiency, product lifetime, electromobility, and environmental protection through sustainable solutions.

As a future materials scientist you will develop new functional materials and 3D-printed components, enabling entirely novel applications. There are no limits to your curiosity and pioneering spirit. Shape a better future on your scientific journey!

Move mountains

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MASTER'S PROGRAMME

Materials Science

PROGRAMME STRUCTURE | 120 ECTS

1st Semester (30 ECTS)

Science of Metals	5 ECTS
Ceramics Engineering	5 ECTS
Smart Materials and Semiconductors	5 ECTS
Mechanics of Materials	5 ECTS
Casting and Processing of Components	5 ECTS
Free elective Module	5 ECTS

2nd Semester (30 ECTS)

High performance Steels and Alloys	5 ECTS
Bio-inspired Ceramics and Composites	5 ECTS
Emerging functional Materials and Surfaces	5 ECTS
Physics of Materials	5 ECTS
Elective Modules*	10 ECTS

3rd Semester (30 ECTS)

Data-driven Materials Design	5 ECTS
Processing and Degradation of Materials	5 ECTS
Elective Modules*	20 ECTS

4th Semester (30 ECTS)

Master Thesis	30 ECTS
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Elective modules* (to choose for 2nd and 3rd semesters)

Hard materials and composites; Materials for extreme environments; Materials in microelectronics; Materials for energy; Biomaterials and soft matter; Additive manufacturing; Atomistic & mesoscale modelling; Metals in applications; Small scale testing; Computational tools for materials design...and more.

à 5 ECTS



For programme details and
registration [follow the link.](#)

04/2025