Management natürlicher Ressourcen

Wasser - Boden - Pflanze

<u>Master</u>

Master of Science bilingual (EN/DE)

120 CP





Programme at a glance

Faculty of Natural Sciences 3 – Agrar- und Ernährungswissenschaften, Geowissenschaften und Informatik

Institute of Geosciences and Geography

Programme type: Bilingual master's programme with 120 credit points (CP), languages: English and German

Degree: Master of Science (MSc)

Standard period of study: 4 semesters

Start of Studies: Winter semester

Specific admission requirements: Yes

This study programme is accredited.

Programme objectives

The master's programme in Management natürlicher Ressourcen (hereinafter Management of Natural Resources) at Halle University is a 2-year degree programme with the following main characteristics:

- → Interdisciplinary and transdisciplinary scientific approach
- → Getting in-depth knowledge of procedures, theories, methods, processes and issues of the environmental compartments water, soil and plants
- → Qualification for scientific work, for scientifically sound judgement, for an objective analysis of scientific research results and for responsible action in professional and social contexts
- → Focus on the recognition and analysis of connected relations and the ability for holistic and integrative reasoning
- → Training of soft skills (e.g. team player capabilities, problem-oriented thinking and work)
- → Strong reference to practical work
- → Research and professionally oriented work
- → Project work (regional and/or international)

Career opportunities

The MSc Management of Natural Resources is the second qualifying degree for carrying out complex scientific work in research and professional settings. The study programme enables students to acquire competences that are prerequisites for objective-oriented and successful action in profession. It also qualifies for PhD positions.

The interdisciplinary and joint study programme of geosciences and agricultural sciences qualifies students on a scientific basis for specific fields of activity and professions (e.g. environmental, spatial and landscape planning). The study programme focuses on the requirements for the protection of water, soil and nature. It provides the basics for practice-oriented activities as well as for scientific work in research centres, universities, consultancies, agencies and authorities.

Depending on the choice of elective modules, the programme qualifies students for the following sectors: Universities and research institutes, scientific and economic service sector on a national or international level such as in authorities and agencies, consulting and engineering offices as well as industry.

Admission requirements

Applicants must hold a bachelor's degree or equivalent degree in natural resources management or a comparable natural science field.

A study programme is comparable if at least 20 CP have been obtained in foundation courses in mathematics, physics, chemistry and biology and at least 60 CP have been obtained in foundation courses of other natural sciences, e.g. agricultural sciences, geology, geography or geoecology and at least 10 CP have been obtained in advanced courses in the fields of water, soil and plants. Decisions on comparability are made by the examination board on the basis of the transcript of records submitted.

Applicants must prove their **English language proficiency** by submitting either TOEFL, IELTS, Cambridge Certificate, Unicert II, German Abitur or an equivalent internationally recognised language certificate attesting **level B2** according to the

Common European Framework of Reference for Languages (CEFR).

However, proof of language proficiency is not required if the first degree was obtained in a study programme taught in English.

Important note: The MSc Management of Natural Resources is a bilingual study programme (English/German). Therefore, international applicants must additionally prove their German language proficiency for studies. For further information, please see www.uni-halle.de/apply.

Admission to the study programme may be subject to conditions. In case of deficits in the comparable undergraduate programme, you may be obliged to catch up on a maximum of 3 modules of the *B.Sc Management natürlicher Ressourcen* (in German) before registering for the master's thesis. However, the additional workload resulting from the imposed bachelor's modules is not part of the master's programme.

About Halle!

Study renewable resources in Halle because ...

- → this study programme integrates both geosciences and agricultural sciences.
- → the contact between lecturers and students is very good and positive learning environments are supported.
- → the modules are configured richly diverse by lectures, exercises, laboratory and field courses as well as excursions.
- → numerous cooperations with major research centres in Halle, such as the Helmholtz Centre for Environmental Research and the Leibniz Institute of Agricultural Development in Transition Economies, enable direct contact with professional practice.
- → we have one of only about 40 coordination offices for sustainability at universities in Europe. We are deeply involved in a sustainable development of research and teaching.

Application

The admission to the MSc Management of Natural Resources is currently **not restricted** (no NC).

- → Applicants with a bachelor's degree (or equivalent) obtained in Germany must apply via <u>www.uni-halle.de/bewerben</u> by 31 August.
- → Applicants with a bachelor's degree (or equivalent) obtained abroad must apply via <u>www.uni-assist.de</u> by 15 June – please see <u>www.uni-halle.de/apply</u> for details.

Halle University reconsiders its admission policy every winter semester and determines whether admission to a study programme is restricted (Uni-NC) or free (no NC). From May each year, the current decision is published at www.uni-halle.de/+mnrma.

Please also check this website for the documents required for the application as well as for possible changes.

Modules

The content, learning objectives, workload, requirements and prerequisites of specific modules are published in the module catalogue and the *study and examination regulations* (in German only).

Compulsory modules (60 CP)

| Module | СР | rec. sem. |
|--|----|--------------|
| Water, soil & plants (15 CP) - all held in English | | |
| Hydrogeology | 5 | 1 |
| Physico-chemistry of soil | 5 | 1 |
| Sustainable land use | 5 | 3 |
| Methods (15 CP) - all held in English | | |
| Special mathematics for geoscientists | 5 | 1 |
| Soil hydrology | 5 | 2 |
| Enviromental toxicology | 5 | 3 |
| Master's thesis | 30 | 4 |

Elective modules (60 CP)

The elective modules focus on the compartments allowing you to choose your specialisation. In the first three semesters you may choose 2/3 of your modules from a broad range of electives taught in both English and German that reflect your personal interests. Some of the elective modules are only taught in German. Elective modules are:

Matter and material flow analysis | Land System Science 1: Global Environmental Change | Water management | Conceptual and empirical approaches to metallogeny in ore deposits | Numerical groundwater modelling | Boden-Pflanze Interaktionsraum Rhizosphäre | Land System Science 2: Climate and Ecosystems | Land System Science 3: Project-based Study in Geoecology I - Collection, Analysis and Interpretation of Data at the Local Scale | Land System Science 4: Project-based Study in Geoecology II - Upscaling to the Landscape Scale Projektmodul Naturschutz | Geothermal Energy | Ressourcenmanagement und Ressourcenschutz | Soils under warm and cold climate | Soil biogeochemical analysis | Management of soil organic matter | Bodenkundliche Projektübungen | Seminar project | Hydrogeochemical processes in groundwater and hydrothermal fluids | Groundwater Management | Environmental and soil mineralogy | Biogeographie | Düngung landwirtschaftlicher Nutzpflanzen | Environmental modelling | Excursion and field course | Agricultural Innovations | Agrarund Ernährungspolitik | Ökonomik des Agrarstrukturwandels | Umwelt-, Agrar- und Ernährungsethik | Bodenstrukturanalyse | Free choice module 1 | Free choice module 2



An Indian site for management of natural resources of water, soils and plants



Danube sinkholes near Tuttlingen

General student guidance

Institute of Geosciences and Geography

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www.ressourcenmanagement.uni-halle.de
 (in German and English; German description of this master's programme also available)

General student guidance

E-Mail: ssc@uni-halle.de Location: Studierenden-Service-Center (SSC), Universitätsplatz 11 → Löwengebäude, 06108 Halle (Saale), Germany

Office hours: see <u>www.uni-halle.de/ssc</u>
We recommend making an appointment in advance.

International students section

Kati Gaudig

E-Mail: international-students@uni-halle.de Location: Studierenden-Service-Center (SSC), Universitätsplatz 11 → Löwengebäude, 06108 Halle (Saale), Germany

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- → <u>www.uni-halle.de/intern</u>ational-students
- → www.uni-halle.de/apply

Publisher's note

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For latest news and further details see www.uni-halle.de/+mnrma

