



Management natürlicher Ressourcen

Master's study programme

General Information

Degree	Master of Science (M.Sc.)
Credit points	120 CP
Standard period of study	4 semesters
Start of studies	Winter semester only
Form of study	Classroom teaching, Full-time studies
Medium of instruction	English and German
Admission	not restricted (no NC)
Specific admission requirements	yes (Details)
Faculty	Naturwissenschaftliche Fakultät III – Agrar- und Ernährungswissenschaften, Geowissenschaften und Informatik
Institute	Institut für Geowissenschaften und Geographie
Accreditation	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)



Study in 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.

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.

Accreditation

The *MSc Management of Natural Resources* is accredited. For more information, please visit the website of the Accreditation Council.

Programme Structure

The study programme is structured as follows:



- Compulsory modules (30 CP)
- Elective modules (60 CP)
- Master's thesis (30 CP)

Modules

Compulsory modules (60 CP)

The 6 compulsory modules are all held in English on request and focus on:

1. The special knowledge on the main topics of the study programme: water, soil and plants (1 module each)
2. Methods (3 modules)

Modules	CP	rec. sem.
Compulsory modules: water, soil and plants		
Hydrogeology	5	1
Physico-chemistry of soil	5	1
Sustainable land use	5	3
Compulsory modules: methods		
Special mathematics for geoscientists	5	1
Soil hydrology	5	2
Environmental toxicology	5	3
Compulsory module: master's thesis		
Abschlussmodul Masterarbeit (Management natürlicher Ressourcen)	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. The last semester is dedicated to your master's thesis.

Modules	CP	rec. sem.
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- 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 für M.Sc. Management natürlicher Ressourcen
- 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 für MSc Ressourcenmanagement
- Düngung landwirtschaftlicher Nutzpflanzen
- Environmental modelling
- Excursion and field course
- Agricultural Innovations
- Agrar- und Ernährungspolitik
- Ökonomik des Agrarstrukturwandels
- Umwelt-, Agrar- und Ernährungsethik
- Bodenstrukturanalyse
- Frei wählbares Modul 1 (Free choice module 1)
- Frei wählbares Modul 2 (Free choice module 2)

1, 2 or
3

> [PDF version of this table in German](#)

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

English versions available upon request. Please contact the Geo Study Office: studienbuero@geo.uni-halle.de



Admission Requirements

*****Note: The contents may be subject to change.*****

Applicants for the *MSc Management of Natural Resources* must

- hold a bachelor's degree or equivalent degree in natural resources management or a comparable natural science field and
- prove good knowledge of written and spoken English.

A study programme is comparable if

- at least 20 ECTS have been obtained in foundation courses in mathematics, physics, chemistry and biology and
- at least 60 ECTS have been obtained in foundation courses of other natural sciences, e.g. agricultural sciences, geology, geography or geoecology and
- at least 10 ECTS 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, Uncert 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 more detailed information on German language requirements for university, see [here](#).

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.

This chapter consists of excerpts roughly translated into English. Only the study and examination regulations are legally binding.

For information in German, see [here](#).

Application

*****Note: The contents may be subject to change.*****



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

- Applicants with a German bachelor's degree (or equivalent) please apply via www.uni-halle.de/bewerben by **31 August**.
- Applicants with a bachelor's degree (or equivalent) from abroad please apply via www.uni-assist.de by **15 June**. > **Information and Application procedure**

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 here (see also General Information).

Required documents

The following documents must be submitted with the application for admission:

1. Proof of your bachelor's degree or equivalent (i.e., graduation certificate and transcripts). **Important note:** Applicants via uni-assist upload their certificates and transcripts both in original language and official translations, unless the originals are in English or in German.
2. Halle University does accept provisional graduation certificates, if your degree is scheduled after the application deadline. Please submit your transcripts indicating minimum 2/3 of your total credits to be passed / your senior student stage, accordingly. The final graduation certificate shall be submitted with enrolment, respectively by no later than 31 January in the year following admission.
3. Proof of English language proficiency (see admission requirements)
4. Language certificate attesting German language proficiency for university studies (see admission requirements)

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Information for international applicants

For any questions regarding application and admission - except eligibility - please see [website](#) or contact the **Student Registration Office - International Students Section**.

Programme Advisor

For detailed information concerning the contents, objectives and structure of the programme, please contact the programme advisor.



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