The Master of Science in Geology is a two-year programme jointly organised by KU Leuven and Ghent University. You receive in-depth training in various fields of geology and develop knowledge, attitudes and skills needed to work in interdisciplinary teams addressing complex geological problems. If you’re interested in pursuing advanced studies in geology in an international environment, the programme offered in Ghent and Leuven - two historic towns near Brussels, the capital of Europe - might just be the right choice for you.

An interuniversity programme

The programme is firmly rooted in the research of the Department of Earth and Environmental Sciences (KU Leuven) and the Department of Geology (Ghent University). Both departments continuously develop and maintain innovative and widely recognised research programmes on fundamental and applied aspects of geoscience. These generally involve collaborative efforts in various international research networks. You will gain much from this strong emphasis on research. Besides enhancing knowledge and skills in numerous specialised courses, including a field-mapping course, you will conduct your own master’s thesis project within a research team (professor(s), postdoc(s), PhD-student(s)) and at the same time develop important scientific skills, such as reporting and presenting, needed in your future career.

Programme


In Geodynamics and Georesources, you will study rock-forming processes and mineral resources in the subsurface. The interaction between various physico-chemical processes in the Earth forms the core of this major. You will develop the ability to analyse and explain the complexity of the various interacting physical and chemical rock-forming processes and apply this knowledge to the exploration of natural resources.

In Surface Processes and Paleoenvironments, you will study the interaction between the geosphere, hydrosphere, atmosphere and biosphere. The focus is on understanding present-day and past processes and placing these processes in a context of global change on various time scales. You will develop the ability to analyse and explain the complex interaction of surface processes relating to the variability of various aspects of the Earth's surface.

In Basins and Orogens, you will study the processes steering the genesis and evolution of sedimentary basins and the surrounding areas. Special attention is given to sedimentary fluxes, the spatial organisation of basins, the evolution of the paleoenvironment, dating of events and exploration strategies. You will develop the ability to analyse and explain the complexity of interacting processes that determine the evolution of sedimentary basins.

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In Groundwater and Mineral Resources, you will study hydrogeological and pedological characteristics and processes with a focus on fundamental and applied aspects of soils and groundwater, including the response to external influences and aimed at sustainable management and protection of these resources. You will develop the attitude to analyse and explain the complexity of physical and chemical processes influencing soil and groundwater, and to come up with remedial measures.

For detailed descriptions of the courses and for the course timetable, please consult www.kuleuven.be/ma/mgoolel

**Admission requirements**

To be eligible for the Master of Science in Geology you must have obtained an academic bachelor's degree in the field of geology. For other diplomas in closely related fields, permission can only be granted after thorough investigation of your study background. You must also provide evidence of your English proficiency.

Programme admission: www.kuleuven.be/ma/mgoolel
General admission: www.kuleuven.be/admissions

**Application procedure**

Students apply at KU Leuven or Ghent University depending on their selected major. Students wishing to specialise in ‘Geodynamics and Georesources’ or ‘Surface Processes and Paleoenvironments’ apply at KU Leuven: www.kuleuven.be/admissions

Students wishing to specialise in ‘Basins and Orogens’ or ‘Groundwater and Mineral Resources’ apply at Ghent University: www.ugent.be/en/degree

Students with a Flemish degree can consult www.kuleuven.be/inschrijven.

**Career perspectives**

As a Master in Geology you may be involved in development tasks, research or management functions. In consultancy, you are likely to find a job in environmental geology, hydrogeology or geotechnology. In industry, you will be involved in exploration, exploitation and treatment of natural resources. In governmental agencies and research institutions, you may be responsible for the inventory, management, research and use of the subsurface or for environmental issues. If you dream of an academic career, you can start by embarking on a PhD project in Leuven, Ghent, or elsewhere.

**Contact**

www.kuleuven.be/ma/mgoolel