

## Geology of Belgium (C000887)

Due to Covid 19, the education and evaluation methods may vary from the information displayed in the schedules and course details. Any changes will be communicated on Ufora.

Course size (nominal values; actual values may depend on programme)  
Credits 5.0 Study time 150 h Contact hrs 62.5 h

### Course offerings and teaching methods in academic year 2020-2021

A (semester 2)	Dutch	Gent	teaching method	hours
			seminar: coached	6.25 h
			exercises	
			excursion	33.75 h
			lecture	22.5 h

### Lecturers in academic year 2020-2021

De Batist, Marc	WE13	lecturer-in-charge
Dewaele, Stijn	WE13	co-lecturer

### Offered in the following programmes in 2020-2021

programme	crdts	offering
<a href="#">Bachelor of Science in Geology</a>	5	A
<a href="#">Preparatory Course Master of Science in Geology</a>	5	A

### Teaching languages

Dutch

### Keywords

Geology , Belgium, stratigraphy, tectonics

### Position of the course

The objective of this course is to provide the students with a thorough knowledge of the main structural units, formations and rocks of Belgium, and with a basic insight in the main geological processes that have influenced the area around Belgium during the Palaeozoic, Mesozoic and Cenozoic.

### Contents

Introduction - Precambrium of Belgium ? - Brabant Massif - Condros Inlier - Ardennes Massifs - Magmatism in the Belgian Palaeozoic - Caledonian metamorphism - Caledonian deformations in Belgium - Devonian Carboniferous Pre-hercynian sedimentation cycle - Lower Devonian - Middle and Upper Devonian - Lower Carboniferous - Upper Carboniferous - Permian Triassic Jurassic - Cretaceous - Cenozoic in general - Palaeocene - Eocene - Oligocene - Miocene - Pliocene - Quaternary - Mineral resources in Belgium - Geophysical Belgium.

### Initial competences

Geology: system Earth (1Ba), Introduction to mineralogy (1Ba), Introduction to petrology (1Ba), Stratigraphy (2Ba), Palaeontology 1 (2Ba), Structural Geology and exercises on Geological maps.

### Final competences

- 1 The student has acquired the following competences: competences in geology and related sciences, general scientific competences and intellectual competences.
- 2 The student knows the main geological units of Belgium where they are present, their structural context, their lithology, stratigraphy and palaeoenvironment and their general palaeogeographical evolution.
- 3 The student has a general knowledge of the composition of the subsurface of Belgium.
- 4 The student is able to search for detailed geological data of specific localities (in literature, archives and electronic data bases).

### Conditions for credit contract

Access to this course unit via a credit contract is determined after successful competences assessment

#### Conditions for exam contract

This course unit cannot be taken via an exam contract

#### Teaching methods

Excursion, lecture, seminar: coached exercises

#### Extra information on the teaching methods

**One day exercises on geological maps and databases, three one-day and one two-day field trips.**

Teaching methods may need to be adjusted, should the COVID19 situation demand this.

#### Learning materials and price

Annually updated course notes: ~10 EUR.

Excursion: ~150 EUR (6 days)

#### References

Bultynck, P. & Dejonghe, L. (Eds), 2001. Lithostratigraphical scale of Belgium.

Geologica Belgica, 4(1-2), 1-168.

de Bethune, P. , Geologie van België, Atlas van België, kaartblad 8, 1/500.000.

#### Course content-related study coaching

Possibility for asking questions regarding the lectures by email or via Ufora.

Personal contact with instructors on appointment or during practical exercises and field workshops.

Coaching during practicals and field workshops by instructors and assistants.

A general feedback on the assignment (NPE) (look up and assemble detailed geological information on two sites in Belgium) will be given via Ufora after handing over the task.

#### Evaluation methods

end-of-term evaluation and continuous assessment

#### Examination methods in case of periodic evaluation during the first examination period

Written examination with open questions

#### Examination methods in case of periodic evaluation during the second examination period

Written examination with open questions

#### Examination methods in case of permanent evaluation

Assignment, report

#### Possibilities of retake in case of permanent evaluation

examination during the second examination period is not possible

#### Extra information on the examination methods

PE: Written examination on lectures, practicals and field work shops. Form and content of the examination is discussed at the end of the lectures. Examination in the second examination period is possible.

NPE: assignment in assembling specific geological information on two places in Belgium (an area with basement and an area with sedimentary cover), with a deadline shortly after the practical.

Examination in the second examination period is not possible. If successful, the points obtained during the first examination period can be transferred to the second examination period, but not to the following year.

#### Calculation of the examination mark

10 % NPE

90 % PE