

**At Louvain-la-Neuve - 60 credits - 1 year - Day schedule - In French**Dissertation/Graduation Project : **YES** - Internship : **NO**Activities in English: **YES** - Activities in other languages : **NO**Activities on other sites : **NO**Main study domain : **Sciences**Organized by: **Faculty of Science (SC)**Programme acronym: **GEOG2M1** - Francophone Certification Framework: 7**Table of contents**

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## GEOG2M1 - Introduction

### Introduction

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## GEOG2M1 - Teaching profile

### Learning outcomes

The organization of the space in which we live results from the impact of man on his natural surroundings. It comes from a great many decisions, taken long ago or recently, which have shaped our environment by adapting it to our needs, for better and for worse. These decisions have stimulated development and also created imbalances : more productive world agriculture, industrial concentrations, urbanization, trade at every level, increase in average well-being, but also delocalization, pollution, damage to land, deforestation, the greenhouse effect or overpopulation. Geography studies the mechanisms which have led to all these effects, in order to control them better.

The objective of the training is an introduction to the three fundamental aspects of the work of a geographer:

- to observe and describe the environment, especially with computerized databases and advanced satellite observation technology ;
- to understand and explain the processes that have been observed, especially by applying models which enable them to be simulated;
- to learn certain concepts in resource management through land development.

Students will develop skills in the field of geography and especially in the study of the interactions between human activities, geographical space and the natural environment. This is done from the perspective of both human and physical geography: it is important to bring them together. The training also provides students with the geographical techniques necessary for the study of this.

The Master in Geography (60 credits) is clearly different from the 120 credit Master in Geography ; although it only takes a year of study, it is inspired by the same objectives, but aims in a more modest way to build on and refine the geographical training in the bachelor's degree.

On successful completion of this programme, each student is able to :

1. Analyser des problèmes géographiques complexes.
  - 1.1. Définir la question de recherche.
  - 1.2. Identifier les connaissances acquises et à acquérir en vue de répondre à la question de recherche.
  - 1.3. Faire une recherche bibliographique dans le domaine, en français et en anglais.
  - 1.4. Identifier une méthodologie rigoureuse afin de répondre à la question de recherche.
  - 1.5. Choisir la méthode d'analyse des données.
  - 1.6. Synthétiser les résultats.
  - 1.7. Mener à bien un travail de recherche utilisant la méthode d'analyse.
2. Mobiliser des savoirs scientifiques spécialisés dans les domaines de la géographie physique et humaine
  - 2.1. Maitriser et utiliser, dans le domaine de la géographie physique :
    - La géomorphologie tectonique
    - La géomorphologie expérimentale
    - La géomorphologie appliquée
    - La biogéographie
    - La géologie et les sciences de la terre
  - 2.2. Maitriser et utiliser, dans le domaine de la géographie humaine :
    - La géographie urbaine
    - La géographie des transports
    - La géographie économique
    - La géographie rurale
    - L'économie spatiale et régionale
    - La géographie médicale et de la santé
    - Les interactions entre la mondialisation et l'environnement
3. Structurer le territoire à partir de la combinaison de différents types de données géographiques et statistiques.
  - 3.1. Analyser le paysage, dans le cadre de séjours éventuels sur le terrain en Belgique et à l'étranger.
  - 3.2. Modéliser l'organisation du territoire grâce à des bases de données géographiques informatisées.
  - 3.3. Evaluer la pertinence et la fiabilité des sources d'information.
  - 3.4. Combiner les informations issues de l'observation.
4. Comprendre et expliquer l'organisation spatiale des phénomènes naturels, des activités humaines et de leurs interactions.
  - 4.1. Identifier les caractéristiques d'organisation spatiale, les composantes physiques et humaines et la manière avec laquelle elles interagissent.
  - 4.2. Formuler des hypothèses de travail.
  - 4.3. Développer des modèles (statistiques, numériques, conceptuels).
  - 4.4. Tester les hypothèses par l'application, la calibration et la validation.
  - 4.5. Faire preuve de rigueur, de précision et d'esprit critique dans l'interprétation des résultats.
5. Utiliser les techniques pour caractériser et représenter le processus géographique étudié.

- 5.1. Utiliser des méthodes d'analyse statistique.
- 5.2. Interpréter et analyser des données satellitaires.
- 5.3. Manipuler des banques de données spatiales et réaliser des cartes thématiques.
- 5.4. Utiliser des logiciels de traitement de données statistiques.
- 5.5. Porter un regard critique sur les techniques utilisées.
6. Communiquer efficacement des résultats, des méthodes à différents types d'acteurs.
  - 6.1. Communiquer oralement et par écrit en français et en anglais (niveau B2)
  - 6.2. Communiquer les résultats d'un travail à des pairs.
  - 6.3. Communiquer et discuter des données, des méthodes et des résultats.
  - 6.4. Communiquer des résultats par la réalisation de cartes, de schémas et de graphiques.
  - 6.5. Maîtriser les outils informatiques indispensables à la communication.

## Programme structure

The programme comprises core subjects of 50 credits and 10 credits for optional activities.

## GEOG2M1 Programme

## Detailed programme by subject

### CORE COURSES [60.0]

- Mandatory
- ⊗ Optional
- △ Not offered in 2022-2023
- ⊖ Not offered in 2022-2023 but offered the following year
- ⊕ Offered in 2022-2023 but not the following year
- △ ⊕ Not offered in 2022-2023 or the following year
- Activity with requisites
- 🌐 Open to incoming exchange students
- 🚫 Not open to incoming exchange students
- [FR] Teaching language (FR, EN, ES, NL, DE, ...)

Click on the course title to see detailed informations (objectives, methods, evaluation...)

○ LGEO2995	Mémoire		FR [q2] [] [15 Credits] 🌐
○ LGEO2997	Séminaire d'encadrement du mémoire	Bas van Wesemael	FR [q1] [15h] [5 Credits] 🌐
○ LGEO2230	Géographie médicale et de la santé	Sophie Vanwambeke	FR [q1] [30h+30h] [5 Credits] 🌐

#### ○ Module de géographie humaine (8 credits)

○ LGEO2110	Mondialisation, développement et environnement	Eric Lambin	FR [q1] [30h+30h] [5 Credits] 🌐
○ LGEO2210	Shaping sustainable urban spaces	Marie-Laurence De Keersmaecker Yves Hanin	FR [q1] [30h] [3 Credits] 🌐

#### ○ Module de géographie physique (5 credits)

○ LGEO2120	Applied geomorphology	Bas van Wesemael	FR [q1] [30h+30h] [5 Credits] 🌐
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#### ○ Une unité d'enseignement parmi (5 credits)

L'étudiant-e suit l'UE organisée pendant l'année de réalisation de son master.

⌘ LGEO2140	Advanced physical geography	Kristof Van Oost Veerle Vanacker	EN [q2] [30h+30h] [5 Credits] 🌐
⌘ LGEO2240	Tectonic geomorphology	Veerle Vanacker	EN [q1] [30h+30h] [5 Credits] 🌐

### o Module de travaux d'intégration (4 credits)

⌘ LGEO2170	Field Excursion	Eric Lambin	FR [q2] [60h+30h] [4 Credits] 🌐
⌘ LGEO2270	Terrain II en géographie	Sophie Vanwambeke	FR [q2] [60h+30h] [4 Credits] 🌐

### o Philosophie (2 credits)

un cours à choisir parmi

⌘ LSC2001	Introduction to contemporary philosophy	Charles Pence Peter Verdée	FR [q2] [30h] [2 Credits] 🌐
⌘ LSC2220	Philosophy of science	Alexandre Guay	EN [q2] [30h] [2 Credits] 🌐
⌘ LFILO2003E	Ethics in the Sciences and technics (sem)	Hervé Jeanmart Charles Pence	FR [q2] [15h+15h] [2 Credits] 🌐
⌘ LTHEO2840	Science and Christian faith	Benoît Bourguin Dominique Lambert	FR [q1] [15h] [2 Credits] 🌐

### o Optional courses (11 credits)

Le programme est à compléter par des cours au choix de manière à atteindre au moins 60 crédits. L'attention des étudiants est attirée par la liste suivante : NB Le cours GEO 1242 ne peut être choisi que par des étudiants qui n'ont pas suivi les cours d'approfondissement en géographie pendant leur bachelier. Ce cours devrait faire partie du curriculum d'un géographe.

⌘ LBIR1362	Environmental Economics	Frédéric Gaspart	FR [q2] [30h+7.5h] [3 Credits] 🌐
⌘ LURBA3011	Actors, territories and development contexts	Roselyne de Lestrangé Aniss Mezoued Chloé Salembier	FR [q1] [50h] [5 Credits] 🌐
⌘ LGEO1242	Cartographic projections and geodesy	Michel Crucifix	FR [q2] [30h+15h] [4 Credits] 🌐
⌘ LECGE1228	Regional Economics	Arastou Khatibi (compensates Joseph Gomes)	EN [q2] [30h+10h] [3 Credits] 🌐
⌘ LGEO2130	Fundamentals of geographic and environmental modelling	Eric Deleersnijder Sophie Vanwambeke	EN [q2] [30h+30h] [5 Credits] 🌐
⌘ LGEO2220	History of geography	Eric Lambin	FR [q1] [22.5h] [3 Credits] 🌐
⌘ LGEO2160	Integrated exercise in geography I	Bas van Wesemael Bas van Wesemael (compensates Patrick Meyfroidt)	EN [q1] [30h+30h] [4 Credits] 🌐
⌘ LGEO2250	Mesures de terrain en géographie		FR [q2] [30h+30h] [5 Credits] 🌐
⌘ LGEO2211	Advanced statistical methods in geography	Christian Hafner	FR [q1] [30h+30h] [5 Credits] 🌐
⌘ LGEO2185	Advanced geo-processing	Kristof Van Oost	EN [q2] [30h+30h] [5 Credits] 🌐

### ⌘ Optional courses

These credits are not counted within the 60 required credits.

⌘ LSST1001	IngénieursSud	Stéphanie Merle Jean-Pierre Raskin (coord.)	FR [q1+q2] [15h+45h] [5 Credits] 🌐
⌘ LSST1002M	Information and critical thinking - MOOC	Myriam De Kesel Jean-François Rees	FR [q2] [30h+15h] [3 Credits] 🌐

## Supplementary classes

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**To access this Master, students must have a good command of certain subjects. If this is not the case, students must take supplementary classes chosen by the faculty to satisfy course prerequisites.**

- Mandatory
- ✂ Optional
- △ Not offered in 2022-2023
- ⊙ Not offered in 2022-2023 but offered the following year
- ⊕ Offered in 2022-2023 but not the following year
- △ ⊕ Not offered in 2022-2023 or the following year
- Activity with requisites
- ⊕ Open to incoming exchange students
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[Click on the course title to see detailed informations \(objectives, methods, evaluation...\)](#)

## ○ Enseignements supplémentaires

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## The programme's courses and learning outcomes

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For each UCLouvain training programme, a [reference framework of learning outcomes](#) specifies the the skills expected of every graduate on completion of the programme. Course unit descriptions specify targeted learning outcomes, as well as the unit's contribution to reference framework of learning outcomes.

## GEOG2M1 - Information

### Access Requirements

Master course admission requirements are defined by the French Community of Belgium Decree of 7 November 2013 defining the higher education landscape and the academic organisation of courses.

General and specific admission requirements for this programme must be satisfied at the time of enrolling at the university.

Unless explicitly mentioned, the bachelor's, master's and licentiate degrees listed in this table or on this page are to be understood as those issued by an institution of the French, Flemish or German-speaking Community, or by the Royal Military Academy.

**In the event of the divergence between the different linguistic versions of the present conditions, the French version shall prevail.**

#### SUMMARY

- > [General access requirements](#)
- > [Specific access requirements](#)
- > [University Bachelors](#)
- > [Non university Bachelors](#)
- > [Holders of a 2nd cycle University degree](#)
- > [Holders of a non-University 2nd cycle degree](#)
- > [Access based on validation of professional experience](#)
- > [Access based on application](#)
- > [Admission and Enrolment Procedures for general registration](#)

### Specific access requirements

In addition to the access conditions described below, candidates will have to provide proof of a sufficient command of the French language (level B1 of the CEFR, Common European Framework of Reference for Languages).

Students who wish to be admitted on the basis of a dossier (see tables below) are invited to consult the [criteria for the evaluation of application](#).

Des précisions ont été apportées à ces critères en 2023-2024, vous pouvez y accéder [ici](#).

### University Bachelors

Diploma	Special Requirements	Access	Remarks
<b>UCLouvain Bachelors</b>			
<a href="#">Bachelor in Geography : General</a>		Direct access	
<a href="#">Bachelor in Physics</a>	Si l'étudiant a suivi la Titre inconnu:Imingeo	Direct access	In some cases, the UCLouvain Enrolment Office, after reviewing their online enrolment or re-enrolment application, will ask the students concerned to provide an enrolment authorisation from the faculty/ school.
<a href="#">Bachelor in Engineering</a>	Si l'étudiant a suivi la Titre inconnu:Imingeo	Direct access	In some cases, the UCLouvain Enrolment Office, after reviewing their online enrolment or re-enrolment application, will ask the students concerned to provide an enrolment authorisation from the faculty/ school.
<b>Others Bachelors of the French speaking Community of Belgium</b>			
		Direct access	
<b>Bachelors of the Dutch speaking Community of Belgium</b>			
		Direct access	
<b>Foreign Bachelors</b>			



Access based on application

## Non university Bachelors

> Find out more about [links](#) to the university

Diploma	Access	Remarks
BA en agronomie, orientation agro-industries et biotechnologies - crédits supplémentaires entre 45 et 60	Les enseignements supplémentaires éventuels peuvent être consultés dans le <a href="#">module complémentaire</a> .	Type court
BA en agronomie, orientation agronomie des régions chaudes - crédits supplémentaires entre 45 et 60		
BA en agronomie, orientation environnement - crédits supplémentaires entre 45 et 60		
BA en agronomie, orientation forêt et nature - crédits supplémentaires entre 45 et 60		
BA en agronomie, orientation techniques et gestion agricoles - crédits supplémentaires entre 45 et 60		
BA en agronomie, orientation techniques et gestion horticoles - crédits supplémentaires entre 45 et 60		
BA en agronomie, orientation technologie animalière - crédits supplémentaires entre 45 et 60		

## Holders of a 2nd cycle University degree

Diploma	Special Requirements	Access	Remarks
"Licenciés"		-	
Masters		-	

## Holders of a non-University 2nd cycle degree

### Access based on validation of professional experience

> It is possible, under certain conditions, to use one's personal and professional experience to enter a university course without having the required qualifications. However, validation of prior experience does not automatically apply to all courses. Find out more about [Validation of priori experience](#).

### Access based on application

Access based on application : access may be granted either directly or on the condition of completing additional courses of a maximum of 60 ECTS credits, or refused.

The first step in the procedure is to submit a file online ( see <https://uclouvain.be/en/study/inscriptions/futurs-etudiants.html>).

Students who wish to be admitted on the basis of a dossier are invited to consult the [criteria for the evaluation of application](#).

## Admission and Enrolment Procedures for general registration

## Teaching method

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The teaching strategy takes its inspiration from the idea of 'taking responsibility for one's own learning' and offers a wide range of learning situations. The integration between human and physical geography is emphasized. The courses are focused on problems in society: environmental changes, mobility, urbanization, globalization and developing countries.

Activities such as seminars and integrated exercises are carried out in advanced areas of geographical research. Ability to use advanced methods of geographical analysis is an important objective of the training: geographical modeling, geographical information systems and satellite teledetection. Practical work gives students the opportunity of dealing with concrete problems and finding solutions to them, often in small groups. The computer rooms with special software for geographical analysis are always open to students. The Master includes at least a week of field work abroad (since the 60 credit course lasts only a year).

## Evaluation

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***The evaluation methods comply with the regulations concerning studies and exams (<https://uclouvain.be/fr/decouvrir/rgee.html>). More detailed explanation of the modalities specific to each learning unit are available on their description sheets under the heading "Learning outcomes evaluation method".***

Students will mainly be assessed on the basis of individual work (e.g. reading, consultation of databases and bibliographic references, writing monographs and reports, presentation of seminars, dissertation and work placement). Where necessary, students will also be assessed on how much they have learned from lectures. As far as possible, there will be continuous assessment, including regular 'open book examinations'. Certain activities will not be given a precise mark but will be officially certified. Assessment of the dissertation is in two stages : a 'progress report' at the end of the first year of the Master and the final presentation.

## Possible trainings at the end of the programme

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The only university training directly accessible from the 60 credit Master in Geography is teacher training (30 credits).

It is also possible, in one year, to gain the 120 credit Master in Geography. This gives access to doctorates and Advanced Masters. Students' attention is drawn to the fact that this progression will require the submission of two dissertations.

## Contacts

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### Curriculum Management

Entity

Structure entity

Denomination

Faculty

Sector

Acronym

Postal address

SST/SC/GEOG

(GEOG)

Faculty of Science (SC)

Sciences and Technology (SST)

GEOG

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<https://uclouvain.be/fr/facultes/sc/geo>

Website

Academic supervisor: Marie-Laurence De Keersmaecker

Jury

- Marie-Laurence De Keersmaecker
- Bas van Wesemael

Useful Contact(s)

- Aloysia Stephenne
- Catherine De Roy

