

**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**

Introduction .....	2
Teaching profile .....	3
- Learning outcomes .....	3
- Programme structure .....	4
- Detailed programme .....	4
- Programme by subject .....	4
- The programme's courses and learning outcomes .....	6
Information .....	7
- Access Requirements .....	7
- Supplementary classes .....	9
- Teaching method .....	10
- Evaluation .....	10
- Possible trainings at the end of the programme .....	10
- Contacts .....	10

## 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.

[> Core courses](#) [ en-prog-2020-geog2m1-tronc\_commun ]

Preparatory Module (only for students who qualify for the course via complementary coursework)

[> Master \[60\] in Geography : General](#) [ en-prog-2020-geog2m1-module\_complementaire ]

## GEOG2M1 Detailed programme

## Programme by subject

### CORE COURSES [60.0]

● Mandatory

△ Courses not taught during 2020-2021

⊕ Periodic courses taught during 2020-2021

⊗ Optional

⊙ Periodic courses not taught during 2020-2021

■ Activity with requisites

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

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

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

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

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

● LGEO2120	Applied geomorphology	Bas van Wesemael	30h+30h	5 Credits	q1
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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 (coord.) Veerle Vanacker	30h+30h	5 Credits	q2 ⊗
⊗ LGEO2240	Tectonic geomorphology	Veerle Vanacker	30h+30h	5 Credits	q1 ⊕

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

⊗ LGEO2170	Field Excursion	Eric Lambin	60h+30h	4 Credits	q2 ⊗
⊗ LGEO2270	Terrain II en géographie	Sophie Vanwambeke	60h+30h	4 Credits	q2 ⊕

### o Philosophie (2 credits)

un cours à choisir parmi

⊗ LSC2001	Introduction to contemporary philosophy	Peter Verdée	30h	2 Credits	q2
⊗ LSC2220	Philosophy of science	Peter Verdée (compensates Alexandre Guay)	30h	2 Credits	q2
⊗ LFILO2003E	Ethics in the Sciences and technics (sem)		15h+15h	2 Credits	q2
⊗ LTHEO2840	Science and Christian faith	Benoît Bourguin (coord.) Dominique Lambert	15h	2 Credits	q1

### 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	30h+7.5h	3 Credits	q2
⊗ LURBA3011	Acteurs, territoires et contextes de développement	Roselyne De Lestrangle Aniss Mezoued Chloé Salembier	50h	5 Credits	q1
⊗ LGEO1242	Cartographic projections and geodesy	Jean-Pascal van Ypersele de Strihou	30h+15h	4 Credits	q2
⊗ LECGE1228	Regional Economics	Joseph Gomes	30h+10h	3 Credits	q2
⊗ LGEO2130	Fundamentals of geographic and environmental modelling	Eric Deleersnijder Sophie Vanwambeke	30h+30h	5 Credits	q2
⊗ LGEO2220	History of geography	Eric Lambin	22.5h	3 Credits	q1
⊗ LGEO2160	Integrated exercise in geography I	Isabelle Thomas Bas van Wesemael	30h+30h	4 Credits	q1
⊗ LGEO2250	Mesures de terrain en géographie	Kristof Van Oost	30h+30h	5 Credits	q2
⊗ LGEO2211	Advanced statistical methods in geography	Christian Hafner	30h+30h	5 Credits	q1
⊗ LGEO2185	Advanced geo-processing	Kristof Van Oost	30h+30h	5 Credits	q2

### ⊗ Optional courses

These credits are not counted within the 60 required credits.

⊗ LSST1001	IngénieuxSud	Jean-Pierre Raskin	15h+45h	5 Credits	q1+q2
⊗ LSST1002M	Information and critical thinking - MOOC	Myriam De Kesel Jim Plumet Jean-François Rees	30h+15h	3 Credits	q2

## The programme's courses and learning outcomes

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For each UCLouvain training programme, a [reference framework of learning outcomes](#) specifies the competences expected of every graduate on completion of the programme. You can see the contribution of each teaching unit to the programme's reference framework of learning outcomes in the document *"In which teaching units are the competences and learning outcomes in the programme's reference framework developed and mastered by the student?"*

## GEOG2M1 - Information


### Access Requirements

*In the event of the divergence between the different linguistic versions of the present conditions, the French version shall prevail*  
*Decree of 7 November 2013 defining the landscape of higher education and the academic organization of studies.*  
*The admission requirements must be met prior to enrolment in the University.*

#### SUMMARY

- > [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

En plus de remplir les conditions d'accès décrites ci-dessous, les candidats devront apporter la preuve d'une maîtrise suffisante de la langue française (niveau B1 du [Cadre européen commun de référence](#)) .

#### 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 (unknown URL)	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 (unknown URL)	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](https://uclouvain.be/fr/etudier/passerelles) (https://uclouvain.be/fr/etudier/passerelles) to the university

Diploma	Access	Remarks
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BA en agronomie (techniques et gestion agricoles) - EPS - crédits supplémentaires entre 45 et 60  
 BA en agronomie (toutes orientations) - HE - crédits supplémentaires entre 45 et 60

Les enseignements supplémentaires éventuels peuvent être consultés dans le [module complémentaire](#).

Type court

## 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

> See the website [Valorisation des acquis de l'expérience](#)

It is possible to gain admission to all masters courses via the validation of professional experience procedure.

### Access based on application

Reminder : all Masters (apart from Advanced Masters) are also accessible on file.

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



## 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, they must add supplementary classes at the beginning of their Master's programme in order to obtain the prerequisites for these studies.**

● Mandatory

△ Courses not taught during 2020-2021

⊕ Periodic courses taught during 2020-2021

⊗ Optional

⊖ Periodic courses not taught during 2020-2021

■ Activity with requisites

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

### ○ Enseignements supplémentaires

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## 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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Website

Academic supervisor: Marie-Laurence De Keersmaecker

Jury

- Marie-Laurence De Keersmaecker
- Bas van Wesemael

Useful Contact(s)

- Aloysia Stephenne
- Catherine De Roy

