

CLIM2M

2014 - 2015

Master [120] in Geography : Climatology

At Louvain-la-Neuve - 120 credits - 2 years - Day schedule - In frenchDissertation/Graduation Project : **YES** - Internship : **NO**Activities in English: **YES** - Activities in other languages : **NO**Activities on other sites : **YES**Organized by: **Faculté des sciences (SC)**Programme code: **clim2m** - European Qualifications Framework (EQF): 7**Table of contents**

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CLIM2M - Introduction

Introduction

CLIM2M - Teaching profile

Learning outcomes

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Programme structure

The programme comprises core subjects of 60 credits, 30 credits for the focus and 30 credits for optional subjects.

Whatever the focus or the options chosen, the programme of this master shall totalize 120 credits, spread over two years of studies each of 60 credits.

[> Tronc commun](#) [en-prog-2014-clim2m-lclim100t.html]

[> Research focus](#) [en-prog-2014-clim2m-lclim200a]

CLIM2M Detailed programme

Programme by subject

CORE COURSES [90.0]

● Mandatory

△ Courses not taught during 2014-2015

⊕ Periodic courses taught during 2014-2015

⊗ Optional

⊖ Periodic courses not taught during 2014-2015

‡ Two years course

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

						Year	
						1	2
● LGEO2110	Mondialisation, développement et environnement	Eric Lambin	30h+30h	5 Credits	1q	x	x
● LGEO2210	Advanced human geography	Dominique Peeters	30h	3 Credits		x	x
● LGEO2120	Applied geomorphology	Kristof Van Oost, Bas van Wesemael (coord.)	30h+30h	5 Credits		x	x
● LGEO2240	Tectonic geomorphology	Veerle Vanacker	30h+30h	5 Credits		x	x
● LGEO2130	Geographic modelling	Eric Deleersnijder, Sophie Vanwambeke	30h+30h	5 Credits	2q	x	x
○ Un cours à choisir parmi les suivants : (5 credits)							
⊗ LGEO2140	Advanced physical geography	Kristof Van Oost (coord.), Veerle Vanacker	30h+30h	5 Credits		x	x
⊗ LGEO2150	Decision making in geography	Dominique Peeters, Isabelle Thomas	30h+30h	5 Credits	2q	x	x

Year

1 2

o Philosophie (2 credits)

⌘ LSC2001	Introduction to contemporary philosophy	Nathalie Frogneux	30h	2 Credits	2q	x	x
⌘ LSC2220	Philosophy of science	Alexandre Guay	30h	2 Credits	2q	x	x
⌘ LFILO2003E	Ethics in the Sciences and technics (sem)	N.		2 Credits		x	x

o Mémoire (30 credits)

o LCLIM2999	Mémoire	N.		22 Credits	2q		x
o LGEO2997	Séminaire d'encadrement du mémoire	Isabelle Thomas	15h	5 Credits		x	
o LGEO2998	Thesis tutorial	Isabelle Thomas	15h	3 Credits			x

o Cours au choix (30 credits)

o Choix parmi les cours de géographie

⌘ LGEO1242	Mathematical Geography	Michel Crucifix, Olivier Lecomte (compensates Jean-Pascal van Ypersele de Strihou), Patrick Meyfroidt (compensates Jean-Pascal van Ypersele de Strihou), Jean-Pascal van Ypersele de Strihou (coord.)	30h+15h	4 Credits	2q	x	x
⌘ LGEO2140	Advanced physical geography	Kristof Van Oost (coord.), Veerte Vanacker	30h+30h	5 Credits		x	x
⌘ LGEO2150	Decision making in geography	Dominique Peeters, Isabelle Thomas	30h+30h	5 Credits	2q	x	x
⌘ LGEO2230	Géographie médicale et de la santé	Sophie Vanwambeke	30h+30h	5 Credits	2q	x	x
⌘ LGEO2250	Mesures de terrain en géographie	Kristof Van Oost, Bas van Wesemael (coord.)	30h+30h	5 Credits	2q	x	x
⌘ LGEO2211	Advanced statistical methods in geography	Dominique Peeters	30h+30h	3 Credits		x	x
⌘ LGEO2185	Advanced geo-processing	Kristof Van Oost	30h+30h	5 Credits		x	x
⌘ LCLIM2270	Terrain II en climatologie	Bas van Wesemael	60h+30h	3 Credits		x	x
⌘ LGEO1321	Human and Economic geography 1	Sophie Vanwambeke	25h+25h	4 Credits	2q	x	x
⌘ LGEO1322	Human and economic geography 2	Marie-Laurence De Keersmaecker, Isabelle Thomas	25h+25h	4 Credits	2q	x	x
⌘ LGEO1323	Human and economic geography (3)	Dominique Peeters	25h+25h	4 Credits	2q	x	x
⌘ LGEO1331	Geomorphology	Bas van Wesemael, Bas van Wesemael (compensates Veerte Vanacker), Veerte Vanacker	30h+30h	5 Credits	2q	x	x
⌘ LGEO1332	Biogeography	Caroline Nieberding, Renate Wesselingh	45h+24h	5 Credits	2q	x	x
⌘ LPHY1365	Meteorology	Michel Crucifix, Thierry Fichetef, Thierry Fichetef (compensates Jean-Pascal van Ypersele de Strihou), Jean-Pascal van Ypersele de Strihou	37.5h +22.5h	5 Credits	1q	x	x

Year

1 2

o Climatologie et sciences de la terre (10 credits)

⊗ LENVI2005	Changements climatiques: impacts et solutions	Philippe Marbaix, Jean-Pascal van Ypersele de Strihou	30h	3 Credits	2q	x	x
⊗ LPHY2160	Internal Geophysics of the Earth and planets	Nicolas Bergeot, Véronique Dehant (coord.), Pascal Rosenblatt	30h	5 Credits	1q	x	x
⊗ LPHY2161	Geodesy and GNSS (Global Navigation Satellite System)	Nicolas Bergeot (coord.), Véronique Dehant, Pascal Rosenblatt	30h	5 Credits	2q	x	x
⊗ LPHY2162	Physique de la haute atmosphère et de l'espace	Viviane Pierrard	22.5h	4 Credits	1q	x	x
⊗ LPHY2253	Téledétection des changements climatiques	Didier Fussen	22.5h +15h	5 Credits	2q	x	x
⊗ LULBG2400	Le système Terre et ses interactions (ULB)	N.		4 Credits		x	x
⊗ LULBG2408	Modélisation en géographie physique (ULB)	N.		2 Credits		x	x
⊗ LULBG2410	Les changements climatiques des derniers 100000 ans (ULB)	N.		6 Credits		x	x
⊗ LCLIM2280	Prévisions météorologiques - WING METEO	N.		8 Credits		x	x

RESEARCH FOCUS [30.0]

○ Mandatory

△ Courses not taught during 2014-2015

⊕ Periodic courses taught during 2014-2015

⊗ Optional

⊖ Periodic courses not taught during 2014-2015

‡ Two years course

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

Year

1 2

○ LCLIM2170	Terrain I en climatologie	Veerle Vanacker	60h+30h	3 Credits		x	x
○ LPHY2150	Physique et dynamique de l'atmosphère et de l'océan I	Michel Crucifix, Thierry Fichetef	45h+9h	6 Credits	1q	x	
○ LPHY2151	Physique et dynamique de l'atmosphère et de l'océan II	Michel Crucifix, Thierry Fichetef	30h	5 Credits	2q	x	x
○ LGEO2290	Travaux dirigés de modélisation climatique	Michel Crucifix, Hugues Goosse	15h	2 Credits		x	
○ LPHY2153	Introduction à la physique du système climatique et à sa modélisation	Hugues Goosse (compensates Jean- Pascal van Ypersele de Strihou), Hugues Goosse, Jean-Pascal van Ypersele de Strihou	30h+15h	5 Credits	1q	x	
○ LPHY2252	Compléments de modélisation du système climatique	Michel Crucifix, Thierry Fichetef, Hugues Goosse, Qiuzhen Yin	45h+7.5h	6 Credits	2q	x	x

o Un cours à choisir parmi les suivants: (3 credits)

⊗ LCLIM2270	Terrain II en climatologie	Bas van Wesemael	60h+30h	3 Credits		x	x
⊗ LGEO2230A	GÉOGRAPHIE MÉDICALE ET DE LA SANTÉ	Sophie Vanwambeke	30h	3 Credits	2q	x	x
⊗ LPHY2160A	Géophysique interne (partim)	N.	30h	3 Credits	1q	x	x

CLIM2M - Information

Admission

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

- [University Bachelors](#)
- [Non university Bachelors](#)
- [Holders of a 2nd cycle University degree](#)
- [Holders of a non-University 2nd cycle degree](#)
- [Adults taking up their university training](#)
- [Personalized access](#)

University Bachelors

Diploma	Special Requirements	Access	Remarks
UCL Bachelors			
		Direct access	
		Access with additional training	
		Access with additional training	
Others Bachelors of the French speaking Community of Belgium			
Tous les bacheliers de la CfB		Access with additional training	
Bachelors of the Dutch speaking Community of Belgium			
		Direct access	
Foreign Bachelors			
		Direct access	

Non university Bachelors

Diploma	Access	Remarks
> Find out more about links to the university		
> BA en sciences agronomiques - type long	Accès au master moyennant réussite d'une année préparatoire de max. 60 crédits	Type long
> BA en agronomie	Accès au master moyennant réussite d'une année préparatoire de max. 60 crédits	Type court

Holders of a 2nd cycle University degree

Diploma	Special Requirements	Access	Remarks
"Licenciés"			
Licence en sciences géographiques		Direct access	Ces étudiants ont directement accès à la deuxième année de master avec éventuellement un programme adapté.

Masters

Tous les masters

Access with additional training

—
 Holders of a non-University 2nd cycle degree**Diploma****Access****Remarks**> Find out more about [links](#) to the university

> MA en sciences agronomiques

> MA en sciences de l'ingénieur industriel en agronomie

Accès direct au master
moyennant ajout éventuel de
15 crédits max

Type long

—
Adults taking up their university training> 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.

Accès selon la procédure de validation des acquis de l'expérience

Consultez le site www.uclouvain.be/vae**—**
Personalized access

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

—
Admission and Enrolment Procedures for general registration

Teaching method

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 climatologist is at the centre of different scientific fields: physical modeling, teledetection, hydrology and the management of natural resources. 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 Master in Climatology is notable for the multidisciplinary background of the teaching staff. Studies will study with lecturers in geography and physics. Activities such as seminars and integrated exercises are designed so that students progressively encounter the complexity of the climatic system. Students in the last year of the Master should therefore be able to use and understand professional climatic modelling systems.

The computer rooms with special software for geographical analysis are always open to students. In the first year of the Master, the field work consists of a week of supervised exercises in the Alps or Spain.

Evaluation

The evaluation methods comply with the [regulations concerning studies and exams](#). 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.

Mobility and/or Internationalisation outlook

La mobilité des étudiants est fortement encouragée, soit par un échange Erasmus ou Mercator hors Belgique, soit à la KULeuven. Ce séjour se fera durant le 2ème quadrimestre du premier master.

La possibilité sera donnée de suivre des cours en anglais. Ceci permettra non seulement aux étudiants de l'UCL de se familiariser mieux encore avec cette langue, mais aussi aux étudiants Erasmus venant de l'étranger de suivre un semestre de cours en anglais.

Des cours approfondis sont donnés par des professeurs visiteurs venant de diverses Institutions belges mais surtout étrangères. Ces enseignements sont parfois dispensés en anglais.

Possible trainings at the end of the programme

The Master in Geography : Climatology gives direct access to a doctorate in science.

Certificates

Contacts

Curriculum Management

Entité de la structure GEOG

Acronyme **GEOG**
Dénomination Ecole de géographie

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Faculté Faculté des sciences (SC)
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Jury

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Usefull Contacts

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