

BA-GEOG | 2024-2025

# Bachelor in Geography: General

The 2024-2025 programme is subject to change. It is provided for information purposes only.

#### Programme mnemonic

BA-GEOG

#### Studies level

Bachelor

#### Learning language

french

#### Schedule

office hours

#### Studies category / subcategory

Sciences and technics / Sciences

#### Campus

Plaine and Solbosch

# Programme objectives

Do you like travelling and maps? Do you like to understand the world around you? Are you interested in the relationship between human societies and their physical environment? Are you concerned about the major issues of our time, such as climate change, the biodiversity crisis, global development inequalities and social contrasts within cities? Are you looking for an education that can lead you to a wide variety of professions?

The Bachelor of Geographical Sciences provides a solid multidisciplinary training for the study of both the physical environment and human societies and the interactions between the former and the latter. Territories, whether urban or rural, are analysed with the help of maps and scientific methods to describe and understand their spatial organisation as well as the processes that govern and shape them (economic development, migratory flows, erosion phenomena, etc.).

Reading, analysis and production of maps, practical work, documentary research, excursions, oral presentations, etc., alone or in groups: through a variety of methods, geography training offers a solid education in the exact, natural, and human sciences. It covers the basic tools and knowledge needed to analyse the

spatial distribution of various phenomena and the interactions between human beings and their environment. They introduce from the first year several courses in both physical and human geography. In physical geography, the courses deal with the formation of territories and their evolution under the influence of climate. In human geography, the courses offer keys to reading the spatial distribution of people and their activities at different scales (from the city to the continent) and throughout the world. From the second year onwards, geomatics courses are added, starting with cartography in the second block and geographic information systems in the third.

# Programme's added value

Learning on a human scale: as most of the specific courses are given to small groups, they leave room for strong interaction between students, assistants and professors, which allows the use of active methods, the development of a critical perspective and leaves room for debate.

Active methods: based on concrete experiences and problemquestions revealing contemporary issues, students are gradually led to appropriate theories, experiment with methods and test models.

Open-source software: the methodological courses use open source software, allowing them to be used well beyond the university framework, in particular through the use of Geographic Information Systems (GIS).

Two excursions lasting several days, partly prepared by the students: one in Belgium, the other in Switzerland, they offer the opportunity to confront the field with a prior geographical analysis using the knowledge and analysis tools acquired during the training.

# Teaching methods

From the first block onwards, almost half of the training consists of discipline-specific courses; this proportion increases gradually in the second and third blocks.

From the 1st block, the ex-cathedra courses are supported by practical work, but also field trips (including a 4-day excursion in the 2nd and 3rd blocks alternating between Switzerland for physical geography and a tour of Belgium for human geography); the proportion of theoretical courses decreases from the 2nd block onwards to leave an important place to exercises, practical work and excursions. From the 2nd and especially the 3rd block, geography courses include personal research work. As most of the discipline-specific courses are given to small groups, the training includes excursions, fieldwork, group work, but also strong interaction between students, assistants, and professors.

In the course of practical work and personal assignments, students learn to use specialised and free software to process geographic data (geographic information systems) or statistical data, as well as specialised libraries and map and atlas collections (map library).

## Succeed in your studies

#### Choose

The information and guidance counsellors at the InfOR-études [https://www.ulb.be/en/studies-info-desk-1] service will help you choose your studies throughout the year.

#### Succeed

Take part in preparatory courses [https://www.ulb.be/en/studies-info-desk-1] or get help to succeed [https://www.ulb.be/en/studies-info-desk-1], before or during your studies.

#### Get help

Apply for financial aid, look for accommodation or a student job, get support [https://www.ulb.be/fr/aides-services-et-accompagnement/aid-services-and-support-1] for your specific needs.

# International/Openness

Mobility programs are primarily developed within the Master programs. They should however be planned in the course of the Bloc 3 of the Bachelor program.

### Job opportunities

Bachelors in geography can go on to a Master's degree in geographical sciences (human geography, territorial development, didactics or urban studies) or in environmental sciences and management (including physical geography).

By continuing the Bachelor's degree with a Master's degree in Geographical Sciences, graduates will have access to professions related to spatial planning, urban planning, the environment, geomatics and geomarketing, and will be able to answer questions such as Where to locate a new company, a new headquarters, a new infrastructure? How to map the territory and its evolution from aerial or satellite images? How to reconcile landscape or heritage protection with such development?

By extending the Bachelor's degree with a Master's degree in environmental sciences, the graduates will constitute a qualified workforce that is indispensable to the various national and international research programmes that today aim to reduce the uncertainties in our predictions of the future footprint of Man on our planet and to contribute to solutions for sustainable development at all spatial scales.

#### **Contacts**

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http://www.ulb.be/facs/sciences/dges

#### Jury President

Eléonore WOLFF

#### **Jury Secretary**

Frank PATTYN



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#### Bloc 1 | BA-GEOG

# Cours obligatoires

CHIM-F101	Chimie générale   Thierry VISART DE BOCARME (Coordinator), François RENIERS and Laurence RONGY  10 credits [lecture: 72h, tutorial classes: 36h, practical work: 12h, project: 24h] first and second terms French
ENVI-F1001	Sciences de la Terre, Environnement et Société   Pierre REGNIER (Coordinator), Jean-Michel DECROLY and Frank PATTYN  1 5 credits [lecture: 48h, field trips: 12h] first and second terms French
GEOG-F1001	Introduction à la géographie urbaine et à l'urbanisme : des données à l'analyse   Eléonore WOLFF (Coordinator) and Mathieu VAN CRIEKINGEN  10 credits [lecture: 24h, practical work: 60h, field trips: 8h, project: 60h]
GEOG-F102	Géomorphologie structurale et dynamique   Frank PATTYN (Coordinator)  ① 5 credits [lecture: 20h, practical work: 24h, field trips: 8h, project: 10h]
GEOG-F103	Fondements de la géographie humaine   Jean-Michel DECROLY (Coordinator)  ① 5 credits [lecture: 36h, project: 20h]
GEOL-F105	Géologie de l'Europe   Vinciane DEBAILLE (Coordinator) and Steeve BONNEVILLE  3 5 credits [lecture: 16h, field trips: 16h]    \$\frac{1}{2}\$ second term
MATH-F119	Mathématiques  ② 10 credits [lecture: 60h, tutorial classes: 60h]    ☐ academic year    French
PHYS-F104	Physique 1   Barbara CLERBAUX (Coordinator), Sébastien CLESSE and Michele SFERRAZZA  10 credits [lecture: 72h, tutorial classes: 36h] first and second terms French



# Bachelor in Geography: General

Bloc 2 | BA-GEOG

# Cours obligatoires

BIOL-F102	Biologie générale   Patrick MARDULYN (Coordinator) and Etienne MEYLAN  ① 5 credits [lecture: 48h]
ECON-D210	Economie politique générale   Gani ALDASHEV (Coordinator)  ① 5 credits [lecture: 24h]
GEOG-F203	Climatologie et glaciologie   Frank PATTYN (Coordinator)  3 5 credits [lecture: 24h, practical work: 24h, project: 10h]
GEOG-F207	Excursions de géographie I   Jean-Michel DECROLY (Coordinator), François FRIPIAT and Frank PATTYN  3 5 credits [field trips: 32h, project: 10h]
GEOG-F210	Géographie de l'Europe   Gilles VAN HAMME (Coordinator)  ② 5 credits [lecture: 24h]
GEOG-F315	Analyses et représentations spatiales   Eléonore WOLFF (Coordinator)  ① 5 credits [lecture: 24h, practical work: 36h, project: 70h]
GEOL-F2001	Introduction à la minéralogie et à la pédologie   Steeve BONNEVILLE (Coordinator) and Thomas DROUET DE LA THIBAUDERIE © 5 credits [lecture: 28h, practical work: 12h, field trips: 12h]
INFO-F206	Informatique   Olivier MARKOWITCH (Coordinator)  3 5 credits [lecture: 24h, tutorial classes: 24h, project: 12h]  first term  French
LANG-F201	Anglais scientifique I Alexander CORNFORD (Coordinator)  ② 5 credits [tutorial classes: 48h]    ☐ second term    ☐ selection    ☐ second term    ☐ second term
MATH-F316	Biogéostatistiques   Thomas VERDEBOUT (Coordinator)  © 5 credits [lecture: 30b. tutorial classes: 24b]

## Formation complémentaire en sciences exactes

# One course chosen from the following CHIM-F1101 (optional) Chimie générale | Thierry VISART DE BOCARME (Coordinator), François RENIERS and Laurence RONGY (optional) S credits [lecture: 12h, tutorial classes: 12h, practical work: 36h] second term MATH-F115 (optional) Compléments d'analyse et algèbre linéaire | Joel FINE (Coordinator) and Michele D'ADDERIO (optional) PHYS-F205 (optional) Physique 2 | Michel TYTGAT (Coordinator) and Michele SFERRAZZA (optional) S credits [lecture: 24h, tutorial classes: 16h, practical work: 20h] first term French

# Options dirigées

A total of five credits chosen from the following



	Sciences de l'environnement
CHIM-F102 optional)	Chimie organique 1   Cécile MOUCHERON (Coordinator)  3 5 credits [lecture: 30h, tutorial classes: 18h]
CHIM-F1101 (optional)	Chimie générale   Thierry VISART DE BOCARME (Coordinator), François RENIERS and Laurence RONGY  • 5 credits [lecture: 12h, tutorial classes: 12h, practical work: 36h]   • second term
GEOL-F104 (optional)	Les temps géologiques : concepts et méthodes   Sandra ARNDT (Coordinator) and Goulven Gildas LARUELLE  ① 5 credits [lecture: 24h, practical work: 24h]   second term   French
GEOL-F204 (optional)	Sédimentologie   Xavier DEVLEESCHOUWER (Coordinator)  ① 5 credits [lecture: 24h, practical work: 12h, field trips: 24h]
GEOL-F211 (optional)	Introduction à la pétrologie Nadine MATTIELLI (Coordinator)  ① 5 credits [lecture: 12h, practical work: 34h, field trips: 16h]
GEOL-F307 (optional)	Cycle de la matière et de l'énergie dans les systèmes géologiques   Pierre REGNIER (Coordinator) and Steeve BONNEVILLE  ① 5 credits [lecture: 36h, tutorial classes: 24h]
MATH-F115 (optional)	Compléments d'analyse et algèbre linéaire   Joel FINE (Coordinator) and Michele D'ADDERIO  3 5 credits [lecture: 30h, tutorial classes: 24h]    second term  French
PHYS-F105 (optional)	La structure de l'univers   Alain JORISSEN (Coordinator) and Rodrigo ALVAREZ  © 5 credits [lecture: 48h]  first term  French
PHYS-F205 (optional)	Physique 2   Michel TYTGAT (Coordinator) and Michele SFERRAZZA  3 5 credits [lecture: 24h, tutorial classes: 16h, practical work: 20h]   first term   French
TRAN-F201 (optional)	Introduction aux enjeux de la durabilité   Wouter ACHTEN (Coordinator) and Chiara ARMENI  3 5 credits [lecture: 24h, project: 24h]    5 second term    French
	Sciences sociales
ETHI-F201 (optional)	Sciences, éthique, histoire et société   Grégoire Wallenborn (Coordinator) and Eric MURAILLE  ① 5 credits [lecture: 48h]
HIST-B115 (optional)	Histoire de l'Epoque contemporaine   Pieter LAGROU (Coordinator)  ① 5 credits [lecture: 48h]
HIST-D102 (optional)	Critique historique appliquée aux sciences sociales   Didier VIVIERS (Coordinator)  3 5 credits [lecture: 24h]
HIST-S101 (optional)	Introduction à l'histoire globale du capitalisme   Kenneth BERTRAMS (Coordinator)  ① 5 credits [lecture: 36h]
POLI-D101 (optional)	Introduction à la science politique   Pascal DELWIT (Coordinator)  ① 5 credits [lecture: 30h]
SOCA-D101 (optional)	Anthropologie sociale et culturelle I   Joël Noret (Coordinator)  ① 5 credits [lecture: 36h]
SOCA-D201 (optional)	Anthropologie sociale et culturelle II   David BERLINER (Coordinator)  3 5 credits [lecture: 24h, tutorial classes: 24h]    second term   French
SOCA-D308 (optional)	Anthropologie économique   Olivia Ange (Coordinator)  3 5 credits [lecture: 24h]  first term  French
SOCA-D494 (optional)	Sociologie de la ville   Pierre LANNOY (Coordinator)  3 5 credits [lecture: 24h]  first term  French
TRAN-F201 optional)	Introduction aux enjeux de la durabilité   Wouter ACHTEN (Coordinator) and Chiara ARMENI  3 5 credits [lecture: 24h, project: 24h]    5 second term    French



# Bachelor in Geography: General

## Bloc 3 | BA-GEOG

## Cours obligatoires

BIOL-F305	Botanique, phytogéographie et ethnoécologie   Farid DAHDOUH-GUEBAS (Coordinator)  ① 5 credits [lecture: 24h, practical work: 15h, field trips: 12h]
GEOG-F211	Systèmes d'information géographique et projections   Eléonore WOLFF (Coordinator) and Michele D'ADDERIO    5 credits [lecture: 24h, practical work: 36h]    second term    French
GEOG-F307	Excursions de géographie II   Jean-Michel DECROLY (Coordinator), François FRIPIAT and Frank PATTYN  1 5 credits [field trips: 32h, project: 40h]   1 second term   1 French
GEOG-F313	Géographie régionale   Jean-Michel DECROLY (Coordinator), Gilles VAN HAMME and Eléonore WOLFF  10 credits [lecture: 48h, practical work: 12h, project: 80h] first and second terms French
GEOG-F318	Projet de recherche et communication scientifique   Jean-Michel DECROLY (Coordinator)  ① 5 credits [practical work: 12h, project: 60h]
GEOG-S101	Géographie économique   Gilles VAN HAMME (Coordinator)  ① 5 credits [lecture: 48h]
GEOL-F309	Géophysique et tectonophysique   Corentin CAUDRON (Coordinator), Thomas LECOCQ and Frank PATTYN  o 5 credits [lecture: 32h, tutorial classes: 12h, field trips: 16h] first term French
LANG-F301	Anglais scientifique II   Hugh MURPHY (Coordinator) and Alexander CORNFORD  3 5 credits [tutorial classes: 48h]   first term   English
SOCA-D304	Démographie   Jean-Michel DECROLY (Coordinator)  ② 5 credits [lecture: 24h, tutorial classes: 12h]

# Options dirigées

10 crédits à choisir en Bloc 3 (15 crédits sur le cycle)

#### 10 to 15 credits chosen from the following Sciences de l'environnement BIOL-F201 Evolution et diversité des eucaryotes : botanique | Pierre Jacques MEERTS (Coordinator) and Jason VLEMINCKX BIOL-F309 Ecologie | Isabelle GEORGE (Coordinator), Pierre Jacques MEERTS and Jason VLEMINCKX ⊙ 5 credits [lecture: 30h, practical work: 30h] 🛗 first term 🔎 French CHIM-F102 Chimie organique 1 Cécile MOUCHERON (Coordinator) CHIM-F1101 Chimie générale Thierry VISART DE BOCARME (Coordinator), François RENIERS and Laurence RONGY GEOL-F104 Les temps géologiques : concepts et méthodes | Sandra ARNDT (Coordinator) and Goulven Gildas LARUELLE



GEOL-F204 (optional)	Sédimentologie   Xavier DEVLEESCHOUWER (Coordinator)  ② 5 credits [lecture: 24h, practical work: 12h, field trips: 24h]
GEOL-F211 (optional)	Introduction à la pétrologie   Nadine MATTIELLI (Coordinator)  ⊙ 5 credits [lecture: 12h, practical work: 34h, field trips: 16h]
GEOL-F307 (optional)	Cycle de la matière et de l'énergie dans les systèmes géologiques   Pierre REGNIER (Coordinator) and Steeve BONNEVILLE   • 5 credits [lecture: 36h, tutorial classes: 24h]   • French
MATH-F115 (optional)	Compléments d'analyse et algèbre linéaire   Joel FINE (Coordinator) and Michele D'ADDERIO  • 5 credits [lecture: 30h, tutorial classes: 24h]
PHYS-F105 (optional)	La structure de l'univers   Alain JORISSEN (Coordinator) and Rodrigo ALVAREZ  ① 5 credits [lecture: 48h]
PHYS-F205 (optional)	Physique 2   Michel TYTGAT (Coordinator) and Michele SFERRAZZA  ① 5 credits [lecture: 24h, tutorial classes: 16h, practical work: 20h]
TRAN-F201 (optional)	Introduction aux enjeux de la durabilité   Wouter ACHTEN (Coordinator) and Chiara ARMENI  ② 5 credits [lecture: 24h, project: 24h]
	Sciences sociales
ETHI-F201 (optional)	Sciences, éthique, histoire et société   Grégoire Wallenborn (Coordinator) and Eric MURAILLE  ① 5 credits [lecture: 48h]
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