

Master in Geology

Focus Research - 1st year

Bloc 1 | M-GEOLA | MA-GEOL

Cours obligatoires

- GEOL-F4002 **Volcanology** | Karen FONTIJN (Coordinator) and Corentin CAUDRON
 5 credits [lecture: 24h, field trips: 16h, project: 30h] second term English
- GEOL-F4003 **Origine de la vie et son évolution sur Terre** | Steeve BONNEVILLE (Coordinator)
 5 credits [lecture: 36h] first term French
- GEOL-F411 **Géochimie élémentaire et isotopique** | Vinciane DEBAILLE (Coordinator)
 5 credits [lecture: 30h, practical work: 15h] first term French
- GEOL-F412 **Applied Geochemical Dynamics** | Corentin CAUDRON (Coordinator) and Vinciane DEBAILLE
 5 credits [lecture: 26h, practical work: 20h] second term French
- GEOL-F414 **Eléments d'hydrogéologie** | Philippe Orban (Coordinator) and Pascal Goderniaux
 5 credits [lecture: 24h, practical work: 24h, field trips: 12h] first term French
- GEOL-F426 **Compléments de métallogénie** | Johan YANS (Coordinator)
 5 credits [lecture: 12h, project: 36h] second term French
- GEOL-F427 **Géologie structurale** | Sara VANDYCKE (Coordinator)
 5 credits [lecture: 24h, field trips: 24h, project: 12h] first term French
- GEOL-F428 **Earth System Modeling** | Pierre REGNIER (Coordinator), Sandra ARNDT, Alizée Roobaert and Sebastiaan VAN DE VELDE
 5 credits [lecture: 24h, practical work: 24h] first term French
- GEOL-F436 **The Global Coastal Ocean on a Changing Planet** | Sandra ARNDT (Coordinator) and Pierre REGNIER
 5 credits [lecture: 12h, practical work: 24h, field trips: 24h] second term French

Cours optionnels

A total of 15 credits chosen from the following

- BIOL-F4002 **Pédologie et écosystèmes** | Thomas DROUET DE LA THIBAUDERIE (Coordinator)
 (optional) 5 credits [lecture: 36h] first term French
- CHIM-F102 **Chimie organique 1** | Cécile MOUCHERON (Coordinator)
 (optional) 5 credits [lecture: 30h, tutorial classes: 18h] second term French
- CHIM-F405 **Photophysique des atmosphères et des milieux interstellaires** | Nathalie VAECK (Coordinator), Sophie Bauduin and Lieven CLARISSE
 (optional) 5 credits [lecture: 36h, project: 12h] second term English/French
- CHIM-H302 **Pollution du milieu physique** | Michel VERBANCK (Coordinator) and Gilles BRUYLANTS
 (optional) 5 credits [lecture: 40h, tutorial classes: 8h, practical work: 12h] second term French
- ENVI-F405 **Climat: sciences et politiques** | Frank PATTYN (Coordinator) and Louise Knops
 (optional) 5 credits [lecture: 40h] second term French
- ENVI-F451 **Télétection des variables climatiques et environnementales** | Pierre-François COHEUR (Coordinator), Sophie Bauduin and Lieven CLARISSE
 (optional) 5 credits [lecture: 36h, project: 40h] second term English/French

ENVI-F526 <small>(optional)</small>	<p>Sciences de l'atmosphère et changements climatiques Pierre-François COHEUR (Coordinator) and Cathy CLERBAUX</p> <p>🕒 5 credits [lecture: 36h, project: 24h] 📅 second term 🗨️ French</p>
ENVI-F527 <small>(optional)</small>	<p>Matière et énergie dans l'environnement: analyse, transport et instabilités François FRIPIAT (Coordinator) and Anne DE WIT</p> <p>🕒 5 credits [lecture: 36h, practical work: 24h] 📅 second term 🗨️ French</p>
GEOG-F211 <small>(optional)</small>	<p>Systèmes d'information géographique et projections Eléonore WOLFF (Coordinator), Michele D'ADDERIO and Julie DE SAEDELEER</p> <p>🕒 5 credits [lecture: 24h, practical work: 36h, project: 40h] 📅 second term 🗨️ French</p>
GEOG-F301 <small>(optional)</small>	<p>Géomorphologie fluviale et littorale Frank PATTYN (Coordinator)</p> <p>🕒 5 credits [lecture: 24h, practical work: 24h, field trips: 8h, project: 16h] 📅 first term 🗨️ French</p>
GEOG-F400 <small>(optional)</small>	<p>The Earth system and its interactions François FRIPIAT (Coordinator) and Brice VAN LIEFFERINGE</p> <p>🕒 5 credits [lecture: 36h, tutorial classes: 24h] 📅 first term 🗨️ English</p>
GEOG-F408 <small>(optional)</small>	<p>Modélisation en géosciences : glaciologie et climatologie Frank PATTYN (Coordinator)</p> <p>🕒 5 credits [lecture: 24h, tutorial classes: 24h] 📅 first term 🗨️ French</p>
GEOG-F410 <small>(optional)</small>	<p>Paléoclimatologie François FRIPIAT (Coordinator)</p> <p>🕒 5 credits [lecture: 36h, practical work: 12h] 📅 second term 🗨️ French</p>
GEOG-F425 <small>(optional)</small>	<p>Téledétection Eléonore WOLFF (Coordinator)</p> <p>🕒 5 credits [lecture: 30h, practical work: 30h, project: 10h] 📅 first term 🗨️ French</p>
GEOL-F4004 <small>(optional)</small>	<p>Cosmoschimie et planétologie Vinciane DEBAILLE (Coordinator) and Alain JORISSEN</p> <p>🕒 5 credits [lecture: 36h] 📅 first term</p> <p>Ce cours est donné un an sur deux.</p>
GEOL-F408 <small>(optional)</small>	<p>Volcanic Terrains Field Trip Karen FONTIJN (Coordinator)</p> <p>🕒 5 credits [field trips: 60h] 📅 second term 🗨️ English</p>
GEOL-F432 <small>(optional)</small>	<p>Interactions biosphère-géosphère: réponse environnementale et climatique Steeve BONNEVILLE (Coordinator), Goulven GILDAS LARUELLE and Pierre REGNIER</p> <p>🕒 5 credits [lecture: 30h, field trips: 24h] 📅 second term 🗨️ French</p>



Master in Geology

Focus Research - 1st year

Bloc 2 | M-GEOLA | MA-GEOL

Cours obligatoires

MEMO-F519 **Mémoire** | Nadine MATTIELLI (Coordinator)
 25 credits [mfe/tfe: 300h] first and second terms

Dans le cadre de la mobilité et du mémoire, l'étudiant peut être amené à suivre des cours ou à réaliser des analyses dans des laboratoires d'universités partenaires (voir liste ERASMUS).

One course chosen from the following

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GEOL-F528 (optional) **Mobilité** | Nadine MATTIELLI (Coordinator)
 10 credits [personal assignments: 120h] first and second terms French

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 20 credits [personal assignments: 240h] academic year French

Cours optionnels

15 to 25 credits chosen from the following

BIOL-F4002 (optional) **Pédologie et écosystèmes** | Thomas DROUET DE LA THIBAUDERIE (Coordinator)
 5 credits [lecture: 36h] first term French

CHIM-F102 (optional) **Chimie organique 1** | Cécile MOUCHERON (Coordinator)
 5 credits [lecture: 30h, tutorial classes: 18h] second term French

CHIM-F405 (optional) **Photophysique des atmosphères et des milieux interstellaires** | Nathalie VAECK (Coordinator), Sophie Bauduin and Lieven CLARISSE
 5 credits [lecture: 36h, project: 12h] second term English/French

CHIM-H302 (optional) **Pollution du milieu physique** | Michel VERBANCK (Coordinator) and Gilles BRUYLANTS
 5 credits [lecture: 40h, tutorial classes: 8h, practical work: 12h] second term French

ENVI-F405 (optional) **Climat: sciences et politiques** | Frank PATTYN (Coordinator) and Louise Knops
 5 credits [lecture: 40h] second term French

ENVI-F451 (optional) **Télétection des variables climatiques et environnementales** | Pierre-François COHEUR (Coordinator), Sophie Bauduin and Lieven CLARISSE
 5 credits [lecture: 36h, project: 40h] second term English/French

ENVI-F526 (optional) **Sciences de l'atmosphère et changements climatiques** | Pierre-François COHEUR (Coordinator) and Cathy CLERBAUX
 5 credits [lecture: 36h, project: 24h] second term French

ENVI-F527 <small>(optional)</small>	Matière et énergie dans l'environnement: analyse, transport et instabilités François FRIPIAT (Coordinator) and Anne DE WIT ⌚ 5 credits [lecture: 36h, practical work: 24h] 📅 second term 🗨️ French
GEOG-F211 <small>(optional)</small>	Systèmes d'information géographique et projections Eléonore WOLFF (Coordinator), Michele D'ADDERIO and Julie DE SAEDELEER ⌚ 5 credits [lecture: 24h, practical work: 36h, project: 40h] 📅 second term 🗨️ French
GEOG-F301 <small>(optional)</small>	Géomorphologie fluviale et littorale Frank PATTYN (Coordinator) ⌚ 5 credits [lecture: 24h, practical work: 24h, field trips: 8h, project: 16h] 📅 first term 🗨️ French
GEOG-F400 <small>(optional)</small>	The Earth system and its interactions François FRIPIAT (Coordinator) and Brice VAN LIEFFERINGE ⌚ 5 credits [lecture: 36h, tutorial classes: 24h] 📅 first term 🗨️ English
GEOG-F408 <small>(optional)</small>	Modélisation en géosciences : glaciologie et climatologie Frank PATTYN (Coordinator) ⌚ 5 credits [lecture: 24h, tutorial classes: 24h] 📅 first term 🗨️ French
GEOG-F410 <small>(optional)</small>	Paléoclimatologie François FRIPIAT (Coordinator) ⌚ 5 credits [lecture: 36h, practical work: 12h] 📅 second term 🗨️ French
GEOG-F425 <small>(optional)</small>	Télé-détection Eléonore WOLFF (Coordinator) ⌚ 5 credits [lecture: 30h, practical work: 30h, project: 10h] 📅 first term 🗨️ French
GEOI-F4004 <small>(optional)</small>	Cosmoschimie et planétologie Vinciane DEBAILLE (Coordinator) and Alain JORISSEN ⌚ 5 credits [lecture: 36h] 📅 first term Ce cours est donné un an sur deux.
GEOI-F408 <small>(optional)</small>	Volcanic Terrains Field Trip Karen FONTIJN (Coordinator) ⌚ 5 credits [field trips: 60h] 📅 second term 🗨️ English
GEOI-F432 <small>(optional)</small>	Interactions biosphère-géosphère: réponse environnementale et climatique Steeve BONNEVILLE (Coordinator), Goulven GILDAS LARUELLE and Pierre REGNIER ⌚ 5 credits [lecture: 30h, field trips: 24h] 📅 second term 🗨️ French
GEOI-F438 <small>(optional)</small>	Géochimie isotopique de l'environnement : Concepts, applications, et méthodes Nadine MATTIELLI (Coordinator), François FRIPIAT and Steven Goderis ⌚ 5 credits [lecture: 24h, practical work: 16h] 📅 second term 🗨️ French

