UCLouvain

DSIR2M5

2026 - 2027

Master [60] of Education, Section 5 : Engineering

At Louvain-la-Neuve - 60 credits - 1 year - Day schedule - In French
Dissertation/Graduation Project : **YES** - Internship : **YES**
Activities in English: **NO** - Activities in other languages : **NO**
Activities on other sites : **NO**
Main study domain : **Sciences de l'éducation et Enseignement**
Organized by: **Faculty of Science (SC)**
Programme acronym: **DSIR2M5**

Table of contents

DSIR2M5 - Introduction

Introduction

DSIR2M5 - Teaching profile

Learning outcomes

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

1

2

3

4

5

DSIR2M5 Programme

Detailed programme by subject

CORE COURSES

- Mandatory
- Optional
- Not offered in 2026-2027
- Not offered in 2026-2027 but offered the following year
- Offered in 2026-2027 but not the following year
- Not offered in 2026-2027 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...)

Didactique et pédagogie (20 credits)

Un cours parmi :

LEISS2101	General pedagogy *Cours dispensé à LLN en horaire de jour*		FR [q1] [37.5h] [5 Credits]
LEISS2102	General pedagogy *Cours dispensé à LLN en horaire décalé*		FR [q1] [37.5h] [5 Credits]
MEISS2103	General pedagogy *Cours dispensé à Mons en horaire décalé*		FR [q1] [30h] [5 Credits]

En fonction de la majeure, un cours parmi :

LSCI2360	Teaching and learning core sciences *Pour la majeure en physique ou chimie. (Seul·es les ingénieur·es civil·es chimistes ont accès à la majeure en chimie.)*		FR [q1] [37.5h] [5 Credits]
LMAT2360	Teaching and learning core mathematics *Pour la majeure en mathématiques*		FR [q1] [37.5h] [5 Credits]

En fonction de la majeure, une paire de cours parmi :

⊠ Didactique et épistémologie des mathématiques

○ LMAT2320A	Didactics and epistemology of mathematics - Part A (general questions)		FR [q1] [22.5h+7.5h] [3 Credits]
○ LMAT2320B	Didactics and epistemology of mathematics - Part B (specialised questions)		FR [q2] [22.5h+7.5h] [3 Credits]

⊠ Didactique et épistémologie de la physique

○ LPHYS2320A	Didactics ans epistemology of science and physics - D2		FR [q1] [22.5h+7.5h] [3 Credits]
○ LPHYS2320B	Didactics ans epistemology of science and physics - D3		FR [q2] [22.5h+7.5h] [3 Credits]

⊠ Didactique et épistémologie de la chimie
Seul·es les ingénieur·es civil·es chimistes ont accès à la majeure en chimie.

○ LCHM2320A	Didactics and epistemology of science and chemistry - D2		FR [q1] [15h+15h] [3 Credits]
○ LCHM2320B	Didactics and epistemology of science and chemistry - D3		FR [q2] [15h+15h] [3 Credits]

○ En fonction de la mineure, un cours parmi :

⊠ LBIO2320C	Didactics and epistemology of science and biology - D2 and listening internship *Si mineure en biologie et majeure en mathématique*		FR [q1] [22.5h+7.5h] [4 Credits]
⊠ LBIO2320D	Didactics and epistemology of science and biology *Si mineure en biologie et majeure en chimie ou en physique*		FR [q1+q2] [30h] [4 Credits]
⊠ LCHM2320C	Didactics and epistemology of science and chemistry - D2 and listening internship *Si mineure en chimie et majeure en mathématique*		FR [q1] [15h+15h] [4 Credits]
⊠ LCHM2320D	Didactics and epistemology of science and chemistry *Si mineure en chimie et majeure en physique*		FR [q1+q2] [20h+20h] [4 Credits]
⊠ LMAT2320C	Didactics and epistemology of mathematics *Si mineure en mathématique et majeure en physique ou chimie*		FR [q1] [22.5h+7.5h] [4 Credits]
⊠ LPHYS2320C	Didactics ans epistemology of science and physics - D2 and listening internship *Si mineure en physique et majeure en mathématique*		FR [q1] [22.5h+7.5h] [4 Credits]
⊠ LPHYS2320D	Didactics ans epistemology of science and physics *Si mineure en physique et majeure en chimie*		FR [q1+q2] [30h] [4 Credits]

○ Sciences humaines et sociales (15 credits)

○ Un cours parmi :

⊠ LEISS2201	Developmental and learning psychology *Cours dispensé à LLN en horaire de jour*	Véronique Leroy (compensates Baptiste Barbot) Nathalie Roland Morgane Senden	FR [q2] [37.5h+15h] [4 Credits]
⊠ LEISS2202	Developmental and learning psychology *Cours dispensé à LLN en horaire décalé*	Véronique Leroy Nathalie Roland Morgane Senden	FR [q2] [37.5h+15h] [4 Credits]

○ Un cours parmi :

⊠ LEISS2203	Social, cultural, and political approaches to education *Cours dispensé à LLN en horaire de jour*	Branka Cattonar Vincent Dupriez	FR [q2] [37.5h+15h] [4 Credits]
⊠ LEISS2204	Social, cultural, and political approaches to education *Cours dispensé à LLN en horaire décalé*	Branka Cattonar Vincent Dupriez	FR [q2] [37.5h+15h] [4 Credits]

○ Un cours parmi :

⊠ LEISS2205	Ethics of education, neutrality, and citizenship *Cours dispensé à LLN en horaire de jour*	Hervé Pourtois	FR [q2] [22.5h] [2 Credits]
⊠ LEISS2206	Ethics of education, neutrality, and citizenship *Cours dispensé à LLN en horaire décalé*	John Pitseys	FR [q2] [22.5h] [2 Credits]

○ Un cours parmi :

⊠ LEISS2104	Communication in school contexts *Cours dispensé à LLN en horaire de jour*		FR [q1] [22.5h+15h] [5 Credits]

⊠ LEISS2105	Communication in school contexts *Cours dispensé à LLN en horaire décalé*		FR [q1] [22.5h+15h] [5 Credits]
⊠ MEISS2106	Communication in school contexts *Cours dispensé à Mons en horaire décalé*		FR [q1] [15h+15h] [5 Credits]

Stages (20 credits)

En fonction de la majeure, une paire de stages parmi :

⊠ Stages de la majeure en chimie

Seul·es les ingénieur·es civil·es chimistes ont accès à la majeure en chimie.

LSCI2370	Observation internship in common core sciences (24 hours) and support seminar		FR [q1] [15h] [5 Credits]
LCHM2350	Long internship (90 hours) and accompanying seminar in chemistry and science		FR [q1+q2] [45h+22.5h] [15 Credits]

⊠ Stages de la majeure en mathématiques

LMAT2370	Observation internship in common core mathematics (24 hours) and support seminar		FR [q1] [15h] [5 Credits]
LMAT2350	Long internship (90 hours) and accompanying seminar in mathematics		FR [q1+q2] [45h+22.5h] [15 Credits]

⊠ Stages de la majeure en physique

LSCI2370	Observation internship in common core sciences (24 hours) and support seminar		FR [q1] [15h] [5 Credits]
LPHYS2350	Long internship (90 hours) and accompanying seminar in physics and science		FR [q1+q2] [45h+22.5h] [15 Credits]

Recherche et intégration (5 credits)

Les deux UE doivent obligatoirement être suivies la même année.

LEISS2900	Methodology of research uses *Cours dispensé à LLN en horaire décalé*	Stéphane Colognesi	FR [q1+q2] [15h] [2 Credits]
LSCI2340	Integrated work and integrated work support seminar	Myriam De Kesel Gabriel Dias de Carvalho Junior Laure Ninove	FR [q1+q2] [30h+22.5h] [3 Credits]

Maîtrise de la langue française

Une épreuve liminaire de maîtrise de la langue française (EMLF) devra être présentée par les étudiants inscrits en master en enseignement (section 4 et section 5). Cet examen OBLIGATOIRE est généralement organisé le 3e mardi d'octobre. Le seuil de réussite de l'examen est fixé à 10/20. En cas d'échec, l'étudiant.e se verra ajouter à son PAE une UE de 5 crédits portant sur la maîtrise de la langue française. Il ne pourra en aucun cas être diplômé si cette UE n'est pas réussie. Inscription à l'épreuve liminaire via la plateforme de l'EMLF. *Pour plus d'information*

From 0 to 5credit(s)

LEISS2207	French language mastery for teaching *L'UE sera retirée du programme annuel de l'étudiant en cas de réussite de l'épreuve liminaire*		FR [q2] [37.5h+7.5h] [5 Credits]

Supplementary classes

To access this Master, students must have a good command of certain subjects. If this is not the case, in the first annual block of their Masters programme, students must take supplementary classes chosen by the faculty to satisfy course prerequisites.

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LPHY1101	Physics 1	Michel Crucifix Thierry Fichefet	FR [q1] [32h+46h] [6 Credits]
LPHY1103	Additional physics	Gabriel Dias de Carvalho Junior Matthieu Génévriez	FR [q2] [40h+10h] [4 Credits]
LCHM1111B	General chemistry		FR [q1] [45h+45h] [8 Credits]
LCHM1141B	Organic chemistry		FR [q2] [30h+30h] [6 Credits]
LCHM1242	Bio-organic chemistry	Benjamin Elias Patrice Soumillion	FR [q1] [30h+10h] [3 Credits]
LCHM1271A	Elements of biochemistry		FR [q1] [30h+20h] [3 Credits]
LBIO1110	Life : diversity and evolution	Patrick Dumont François Renoz	FR [q1] [30h+10h] [4 Credits]
LBIO1111	Cell and molecular biology	Patrick Dumont Charles Hachez	FR [q1] [30h+20h] [5 Credits]
LBIO1112	Organism biology : plants and animals	Muriel Quinet Jean-François Rees	FR [q2] [30h+30h] [6 Credits]
LBIO1116	Scientific approach in biology	Muriel Quinet Nicolas Schtickzelle	FR [q2] [30h+30h] [4 Credits]
LBIO1117	Ecology I	Renate Wesselingh	FR [q2] [30h+10h] [4 Credits]
LBIO1217	Ecology II		EN [q2] [30h+10h] [3 Credits] *> French-friendly*
LBIO1235	General cell physiology	Stanley Lutts Jean-François Rees	FR [q1] [15h+15h] [2 Credits]
LBIO1223	Molecular biology	Corentin Claeys Bouuaert Bernard Hallet	FR [q2] [50h+20h] [6 Credits]
LBIO1121	Genetics	Charles Hachez	FR [q2] [20h+15h] [2 Credits]
LBIO1310	Biological evolution	Simon Baeckens François Renoz René Rezsohazy	FR [q2] [30h+10h] [3 Credits]
LBIO1330	Integrated animal biology : reproduction and development	Patrick Dumont René Rezsohazy	FR [q1] [30h+10h] [3 Credits]
LBIO1333	Integrated animal biology: circulation, respiration, digestion and excretion	Patrick Dumont Françoise Gofflot René Rezsohazy	FR [q2] [30h+10h] [3 Credits]
LBIO1355	Speciation : origin of biodiversity	Simon Baeckens Renate Wesselingh	FR [q1] [20h+10h] [2 Credits]
LSST1002M	Information and critical thinking - MOOC		FR [q1] [30h+15h] [3 Credits]
LBRMC2101	Genetic engineering	François Chaumont (coord.) Charles Hachez	FR [q1] [37.5h+15h] [5 Credits] *> English-friendly*

⊠ LBBMC2102	Integrated molecular and cellular biology	Henri Batoko Bernard Hallet Pierre Morsomme Melissa Page	EN [q1] [30h] [3 Credits]
⊠ LBOE2111	Advanced and applied evolutionary biology	Simon Baeckens	EN [q1] [35h+30h] [3 Credits]
⊠ LBOE2120	Conservation de la biodiversité	Nicolas Schtickzelle	FR [q1] [45h+15h] [4 Credits]
⊠ LBOE2161	Behavioral ecology and sociobiology	Hans Van Dyck	FR [q2] [30h+15h] [4 Credits]
⊠ LBOE2191	Ecology and society	Hans Van Dyck	FR [q2] [30h] [2 Credits]
⊠ LVETE1337	Immunology		FR [q1] [25h+10h] [3 Credits]
⊠ LMAT1141	Geometry I	Pascal Lambrechts	FR [q2] [45h+30h] [7 Credits]
⊠ LMAT1221	Mathematical analysis : integration	Heiner Olbermann	FR [q1] [30h+30h] [5 Credits] *> English-friendly*
⊠ LMAT1231	Multilinear algebra and group theory	Pierre-Emmanuel Caprace	FR [q1] [30h+30h] [5 Credits] *> English-friendly*
⊠ LMAT1271	Calculation of probability and statistical analysis	Anna Kiriliouk	FR [q2] [30h+30h] [6 Credits] *> English-friendly*
⊠ LMAT1323	Topology	Pedro Dos Santos Santana Forte Vaz	FR [q1] [30h+15h] [5 Credits] *> English-friendly*
⊠ LMAT1222	Complex analysis 1	Tom Claeys	FR [q2] [30h+15h] [5 Credits] *> English-friendly*
⊠ LMAT1261	Lagrangian and Hamiltonian mechanics	Christian Walmsley Hagendorf	FR [q1] [22.5h+30h] [5 Credits] *> English-friendly*
⊠ LPHYS1213	Physics of fluids	Michel Crucifix Eric Deleersnijder	FR [q2] [37.5h+30h] [5 Credits]

The programme's courses and learning outcomes

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.

DSIR2M5 - Information

Access Requirements

SUMMARY

Holders of a 2nd cycle University degree

Diploma	Special Requirements	Access	Remarks
"Licenciés"			
		Access based on application	
		Direct access	
		Access based on application	
Masters			
		Direct access	
		Direct access	
		Direct access	
		Direct access	
		Direct access	
		Direct access	
		Direct access	
		Direct access	
		Direct access	
		Direct access	
		Direct access	
		Direct access	
		Direct access	
		Direct access	
		Direct access	
		Access based on application	
		Access based on application	
		Access based on application	
		Access based on application	

Access based on validation of professional experience

Access based on application

Admission and Enrolment Procedures for general registration

Evaluation

The evaluation methods comply with the Academic regulations and procedures. More detailed explanation of the modalities specific to each learning unit are available on their description sheets under the heading "Learning outcomes evaluation method".