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## MINPOLY - Introduction

### Introduction

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## MINPOLY - Teaching profile

### Learning outcomes

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

### Programme

#### DETAILED PROGRAMME BY SUBJECT

- Mandatory
- ⌘ Optional
- △ Not offered in 2023-2024
- ⊖ Not offered in 2023-2024 but offered the following year
- ⊕ Offered in 2023-2024 but not the following year
- △ ⊕ Not offered in 2023-2024 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...)

Year

2 3

#### Content

L'étudiant-e sélectionne 30 crédits parmi les cours suivants, conformément aux conditions d'accès.

#### ⌘ Chimie et physique appliquées

⌘ LMAPR1805	<a href="#">Introduction to materials science</a>	Jean-Christophe Charlier (coord.) Pascal Jacques Bernard Nysten Thomas Pardoën	PS [q2] [30h+30h] [5 Credits] 🌐	X	
⌘ LMECA1901	<a href="#">Continuum mechanics.</a>	Philippe Chatelain Issam Doghri	PS [q2] [30h+30h] [5 Credits] 🌐	X	
⌘ LMAPR1230	<a href="#">Organic chemistry</a>	Sophie Demoustier Charles-André Fustin	PS [q1] [30h+30h] [5 Credits] 🌐		X
⌘ LMAPR1400	<a href="#">Kinetics and thermodynamics</a>	Juray De Wilde Denis Mignon	PS [q2] [30h+30h] [5 Credits] 🌐		X
⌘ LMAPR1491	<a href="#">Statistical &amp; quantum physics</a>	Jean-Christophe Charlier Xavier Gonze Luc Piraux Gian-Marco Rignanese	PS [q1] [30h+30h] [5 Credits] 🌐		X
⌘ LMAPR1492	<a href="#">Materials physics</a>	Jean-Christophe Charlier Xavier Gonze Luc Piraux Gian-Marco Rignanese	PS [q2] [37.5h+22.5h] [5 Credits] 🌐		X

#### ⌘ Construction

⌘ LGCIV1022	<a href="#">Mechanics of structures</a>	Pierre Latteur	PS [q2] [30h+30h] [5 Credits] 🌐	X	
⌘ LGCIV1023	<a href="#">Structural Analysis</a>	João Saraiva Esteves Pacheco De Almeida	PS [q1] [30h+30h] [5 Credits] 🌐		X
⌘ LGCIV1031	<a href="#">Structural Materials and Geomaterials</a>	Hadrien Rattet João Saraiva Esteves Pacheco De Almeida	PS [q2] [30h+30h] [5 Credits] 🌐		X

				Year	
				2	3
⊗ LGCIV1032	Reinforced concrete structures	Jean-François Cap	PO [q2] [30h+30h] [5 Credits] 🌐		X
⊗ LGCIV1051	Hydraulic	Sandra Soares Frazao	PO [q2] [30h+30h] [5 Credits] 🌐		X
⊗ LGCIV1072	Soil mechanics	Hadrien Rattet	PO [q1] [30h+30h] [5 Credits] 🌐		X

### ⊗ Electricité

⊗ LELEC1101	Project in Electricity 1 : Electrical circuits	Christophe Craeye Bruno Dehez Claude Oestges (coord.)	PO [q2] [30h+30h] [5 Credits] 🌐	X	
⊗ LELEC1310	ELECTROMECHANICAL CONVERTERS	Bruno Dehez	PO [q2] [30h+30h] [5 Credits] 🌐		X
⊗ LELEC1360	TELECOMMUNICATIONS	Luc Vandendorpe	PO [q2] [30h+30h] [5 Credits] 🌐		X
⊗ LELEC1370	Measurements and electrical circuits	Christophe Craeye Bruno Dehez Claude Oestges (coord.)	PO [q2] [30h+30h] [5 Credits] 🌐	X	
⊗ LELEC1530	Basic analog and digital electronic circuits	Denis Flandre Jean-Didier Legat	PO [q1] [30h+30h] [5 Credits] 🌐		X
⊗ LELEC1755	Physics of electronic devices and transmission lines	Denis Flandre (coord.) Claude Oestges	PO [q1] [30h+30h] [5 Credits] 🌐		X

### ⊗ Génie biomédical

⊗ LGBIO1111	Cell biology and physiology	Charles De Smet Christophe De Vleeschouwer Pascal Kienlen-Campard	PO [q2] [30h+15h] [5 Credits] 🌐	X	
⊗ LGBIO1112	Introduction to biomedical engineering	Philippe Lefèvre	PO [q2] [45h] [5 Credits] 🌐	X	
⊗ LGBIO1113	Systems Anatomy and Physiology	Catherine Behets Wydemans Olivier Cornu Greet Kerckhofs	PO [q2] [30h+15h] [5 Credits] 🌐		X
⊗ LGBIO1115	Introduction to Neuroscience	Julie Duque (coord.) Aleksandar Jankovski Marcus Missal Sylvie Nozaradan	PO [q2] [30h+30h] [5 Credits] 🌐		X
⊗ LBIR1250	Biochemistry I	Emeline Dierge (compensates Yvan Larondelle) Michel Ghislain Yvan Larondelle (coord.)	PO [q1] [30h+15h] [5 Credits] 🌐		X
⊗ LINMA1510	Linear Control	Gianluca Bianchin	PO [q1] [30h+30h] [5 Credits] 🌐 > French-friendly		X

### ⊗ Informatique

⊗ LINFO1104	Programming language concepts	Peter Van Roy	PO [q2] [30h+30h] [5 Credits] 🌐	X	
⊗ LINFO1121	Algorithms and data structures	Pierre Schaus	PO [q1] [30h+30h] [5 Credits] 🌐		X
⊗ LINFO1123	Calculability, Logic and Complexity	Yves Deville	PO [q2] [30h+30h] [5 Credits] 🌐	X	
⊗ LINFO1252	Informatic Systems	Etienne Riviere	PO [q1] [30h+30h] [5 Credits] 🌐		X
⊗ LINFO1341	Computer networks	Olivier Bonaventure	PO [q2] [30h+30h] [5 Credits] 🌐		X
⊗ LINFO1361	Artificial intelligence	Eric Piette (compensates Yves Deville)	PO [q2] [30h+30h] [5 Credits] 🌐		X

### ⊗ Mathématiques appliquées

⊗ LINMA1170	Numerical analysis	Jean-François Remacle	PO [q2] [30h+22.5h] [5 Credits] 🌐		X
⊗ LINMA1315	Mathematical analysis : complements	Jean Van Schaftingen Jean Van Schaftingen (compensates Pierre-Antoine Absil)	PO [q2] [30h+22.5h] [5 Credits] 🌐	X	
⊗ LINMA1510	Linear Control	Gianluca Bianchin	PO [q1] [30h+30h] [5 Credits] 🌐 > French-friendly		X

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⊗ LINMA1691	Discrete mathematics - Graph theory and algorithms	Vincent Blondel Jean-Charles Delvenne	FB [q1] [30h+22.5h] [5 Credits] 🌐		X
⊗ LINMA1702	Optimization models and methods I	François Glineur	FB [q2] [30h+22.5h] [5 Credits] 🌐	X	
⊗ LINMA1731	Stochastic processes : Estimation and prediction	Gianluca Bianchin Gianluca Bianchin (compensates Pierre-Antoine Absil) Luc Vandendorpe	FB [q2] [30h+30h] [5 Credits] 🌐 > French-friendly		X

### ⊗ Mécanique

⊗ LMECA1100	Deformable solid mechanics.	Issam Doghri	FB [q1] [30h+30h] [5 Credits] 🌐		X
⊗ LMECA1210	Description and analysis of mechanisms	Francesco Contino Paul Fisette Benoît Raucant	FB [q2] [30h+30h] [5 Credits] 🌐	X	
⊗ LMECA1321	Fluid mechanics and transfer phenomena.	Vincent Legat Grégoire Winckelmans	FB [q1] [30h+30h] [5 Credits] 🌐		X
⊗ LMECA1451	Mechanical manufacturing.	Laurent Delannay Aude Simar	FB [q2] [30h+30h] [5 Credits] 🌐		X
⊗ LMECA1855	Thermodynamics and energetics.	Yann Bartosiewicz Miltiadis Papalexandris	FB [q2] [30h+30h] [5 Credits] 🌐		X
⊗ LMECA1901	Continuum mechanics.	Philippe Chatelain Issam Doghri	FB [q2] [30h+30h] [5 Credits] 🌐	X	

## THE PROGRAMME'S COURSES AND LEARNING OUTCOMES

For each UCLouvain training programme, a [reference framework of learning outcomes](#) specifies 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.

## MINPOLY - Information

### 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".*

### Contacts

#### Curriculum Management

##### Faculty

Structure entity	SST/EPL
Denomination	Louvain School of Engineering ( <a href="#">EPL</a> )
Sector	Sciences and Technology ( <a href="#">SST</a> )
Acronym	EPL
Postal address	Rue Archimède 1 - bte L6.11.01 1348 Louvain-la-Neuve Tel: <a href="tel:+322472460">+32 (0) 10 47 24 60</a> - Fax: <a href="tel:+322472466">+32 (0) 10 47 24 66</a> <a href="http://www.uclouvain.be/epl">http://www.uclouvain.be/epl</a>
Website	<a href="http://www.uclouvain.be/epl">http://www.uclouvain.be/epl</a>

##### Mandate(s)

- Dean : Alain Jonas
- Administrative director : Julie Claus

##### Commission(s) of programme

- Commission de programme - Tronc commun bachelier ingénieur civil ([BTCI](#))
- Commission de programme en science des données, cryptographie et sécurité ([DACs](#))
- Commission de programme - Ingénieur civil électricien ([ELEC](#))
- Commission de programme - Ingénieur civil électromécanicien ([ELME](#))
- Commission de programme - Ingénieur civil en chimie et sciences des matériaux et ingénieur civil physicien ([FYKI](#))
- Commission de programme - Ingénieur civil biomédical ([GBIO](#))
- Commission de programme - Ingénieur civil des constructions ([GC](#))
- Commission de programme - Sciences informatiques et ingénieur civil en informatique ([INFO](#))
- Commission de programme - Ingénieur civil en mathématiques appliquées ([MAP](#))
- Commission de programme - Ingénieur civil mécanicien ([MECA](#))
- Commission de programme du bachelier en sciences informatiques à Charleroi ([SINC](#))

Academic supervisor: [Laurent Jacques](#)

