



INFORMATICS
& TECHNICS



INDUSTRIAL ENGINEERING GRAMME



HELMo Gramme is accredited by



DESTINATION

HELMo University College in the Walloon region

8400
STUDENTS

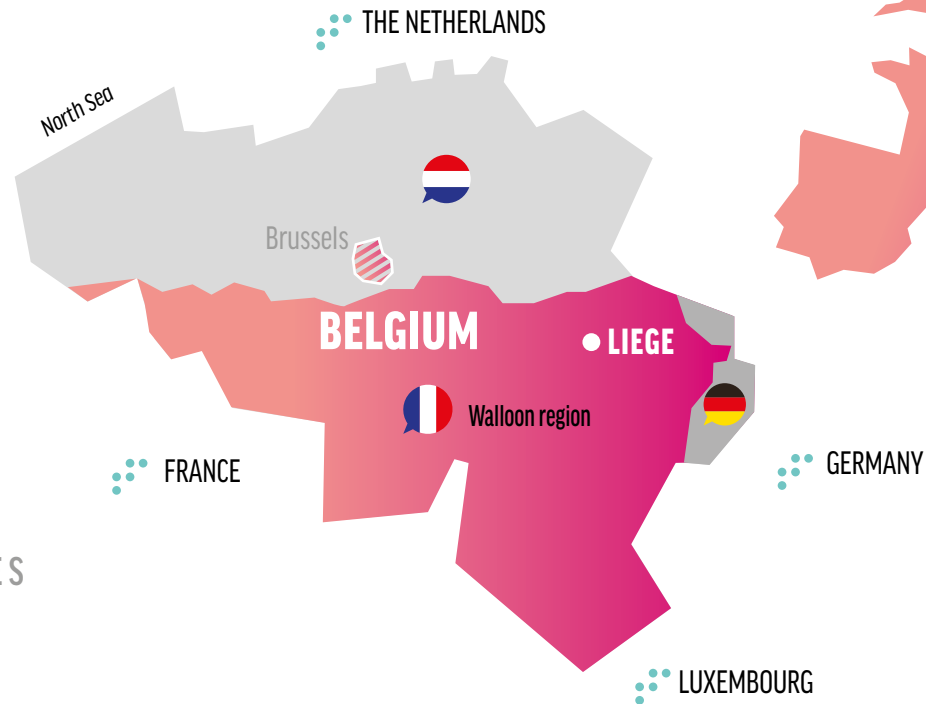
5
DEPARTMENTS

900
STAFF
MEMBERS

+40 BACHELOR,
MASTER DEGREES AND
SPECIALIZATIONS

1800
GRADUATES A YEAR

11 INSTITUTES
AND 3 CAMPUSES
in Liège, Loncin, Huy,
Theux and Verviers





Studying at HELMo is...

Attending programmes of high quality, which allow students to **be creative and active** during their studies

Working closely with the **local community** and with a **very large network of organizations** willing to help its students meet the requirements of the job market

Having the possibility to participate in **double or triple degree programmes**

Benefiting from **a student-centered teaching methodology**: disciplines are practical and open to the labour market. The teaching methods used are lectures, discussions in small groups of students, internships, a final assignment... In the Master degrees, the used methods are inductive: from case analysis to theoretical justification; an alternation of theory – practice, research missions with a strong link to industries and universities, optional course units and a final assignment for students in the last study year

Attending **degree programmes open to the world**: HELMo has signed more than 100 bilateral agreements with institutions of Higher Education in Europe and around the world

Being in an institution which is a **member of thematic networks** (Businet, Comenius Association, EAIE, EASSW, ERACON, FESET, NIBS)

Being allowed to attend courses and lectures in **other institutions** of higher Education

Doing an internship abroad



Life at HELMO is...

Participating in **research and innovation projects**

Benefiting from **pedagogical tools and infrastructures, continuously being improved**: new campuses, computer rooms, Wi-fi, e-learning

Being accompanied by a **students' department** and/or an **Educational and social assistance** (workshops, stress management, tutoring...)

Joining a students' association, parties, cultural events, sports associations and **a lot of projects** in the different departments

Having support from an **international office** for all Erasmus exchanges, internships abroad, intercultural meetings, ...

Always **Lifelong learning**



DESTINATION



••• LIEGE

Coming to HELMo means discovering a very rich and diversified region close to Germany, the Netherlands, France and Luxemburg. Liège has long been described as being one of three sisters, together with Aachen (in Germany) and Maastricht (in the Netherlands).

Studying in Liège means also discovering a city with a rich historical, cultural and industrial past. It is the largest city of the French-speaking community in Belgium and is the economic capital of the Walloon Region. Called "la Cité Ardente" with reference to the independent spirit of its inhabitants, Liège has a lot of museums and prestigious cultural institutions like the Orchestre Philharmonique Royal de Liège, The Opéra Royal de Wallonie or the new Theatre, the Reflektor for music concerts...

As a student town, Liège has an important social life and is crawling with pubs, cinemas, restaurants, sports centres, etc...

From being an old steel-manufacturing-based town, it has successfully undergone a transition into developing high-technology industries and services: with some significant development poles in sectors such as space, biotechnology, transport and logistics...

But the most significant point is that Liège is a warm open-minded town, thanks to its geographical position mixing French, Flemish, Dutch and German cultures.

“LIÈGE-BASTOGNE-LIÈGE”

OPEN-MINDED
CITY

LE CARRÉ

FOLKLORE
(TCHANCHÈS-NANÈS)

LIVELY
CITY

ST TORÈ

ECONOMIC CAPITAL
OF WALLONIA

VERY RICH AND
DIVERSIFIED REGION
CLOSE TO GERMANY
AND THE NETHERLANDS

WAFFLES

SIROP

MULTICULTURAL
CITY



THEATRE

BEER

STUDENTS' LIFE

AIRPORT

BOULETS-FRITES

SPACE CENTER

LOGISTICS

JEUDREDI

OPERA

CHOCOLATE

STANDARD DE LIÈGE

LES FRÈRES DARDENNE
(MOVIE MAKERS)

WITH A RICH
HISTORICAL, CULTURAL
AND INDUSTRIAL PAST

MIX OF FRENCH, FLEMISH,
DUTCH AND GERMAN
CULTURES

MUSIC PLAYERS

BIOTECHNOLOGY

DESTINATION



THE INTERNATIONAL RELATIONS OFFICE AT HELMO

The main International Relations office is managed by :



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(Head of the department)
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Manon Habay
(Incoming and outgoing students officer)
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We work in close collaboration with the international coordinators from the different study programmes.

One of the most important aims of the international office is to increase the number of exchange students (outgoing and incoming).

Therefore, incoming students are very welcome to HELMO:

Compulsory welcome days at the beginning of each semester (in September and in January) – social, cultural, linguistic and integration activities are offered during these days. Students usually meet the international coordinator of their study programme, they also have the opportunity to discover the department and to meet other Erasmus students. They have to attend a conference about the Belgian Culture and habits.



A **module called "Belgian Culture and Heritage" (BCH)**: It gives incoming students the opportunity to visit Belgian towns, to taste traditional Belgian meals, to discover regional product makers. It can be included in the Learning agreement for 2 ECTS.

French as a foreign language

As most of the study programmes are taught in French, we recommend students to have a very good level in French; in some departments, the B1 level is required.

Therefore, in order to help the incoming students improve it, HELMo offers a French course (5ECTS) during the autumn semester. And during the spring semester, HELMo has a partnership with ISLV - University of Liège (5 ECTS).

However, the business department offers a 30 ECTS programme in English ONLY during the autumn semester.

Academic recognition: HELMo adheres to the fundamental aims of the Bologna process, and to transcribe the records obtained abroad, HELMo uses the Egracons system (<http://egracons.eu/>).

ESN Team was set up to organize activities for incoming students, to help them during their stay in Liège;

The ESN will:

Pick up students on arrival	Help students find accommodation
Advise about events at HELMo, in Liege or even in Belgium (concerts,...)	Organize sport, cultural and social activities
Do not hesitate to check our facebook page "ESN HELMo"	



Further information can be found on <https://www.helmo.be/CMS/Profils/International/EN/Students-IN.aspx>.

INDUSTRIAL ENGINEER DEPARTMENT

**“Knowing to Serve”
For a human-concerned technology**



•• HISTORICAL BACKGROUND

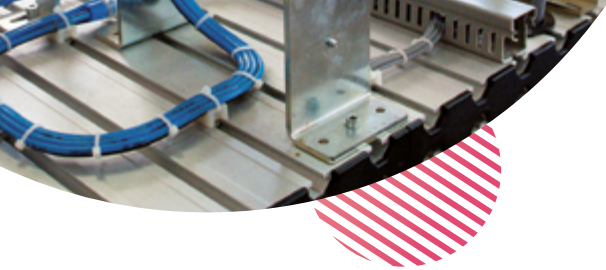
The HELMo Gramme Institute located in Liège which recently celebrated its 110th anniversary was founded in 1906 by a Jesuit father. As a major department of the HELMo University College with circa 500 students, it is one of the most prominent institutions which grants the industrial engineer diploma in the French-speaking community of Belgium. Its reputation is based on a challenging level of studies combined with high quality educational mentoring.

HELMo's bachelor and master degrees in industrial engineering sciences are an audacious mix of engineering sciences (mathematics, physics, chemistry), applied sciences (mechanics, electricity, thermodynamics, ...), technical courses (IT's, design and graphic techniques, technology, ...) and soft skills (English, economics, sociology, philosophy, project management, entrepreneurship skills).

This polyvalence is for our graduated engineer an essential asset which allows him, if needed, to bring in his additional value to various problem solving issues and also to redirect his career in another industrial field if requested.

Proximity educational methods based on modern tools allows the student to let his creativity grow with the years. From the very beginning, practical applications, manipulations in the laboratories and group works allow him/her to master the technical reality. Afterwards, projects and two long-term internships give the student the opportunity to immerse him/herself into the day-to-day life of a Belgian or foreign company.

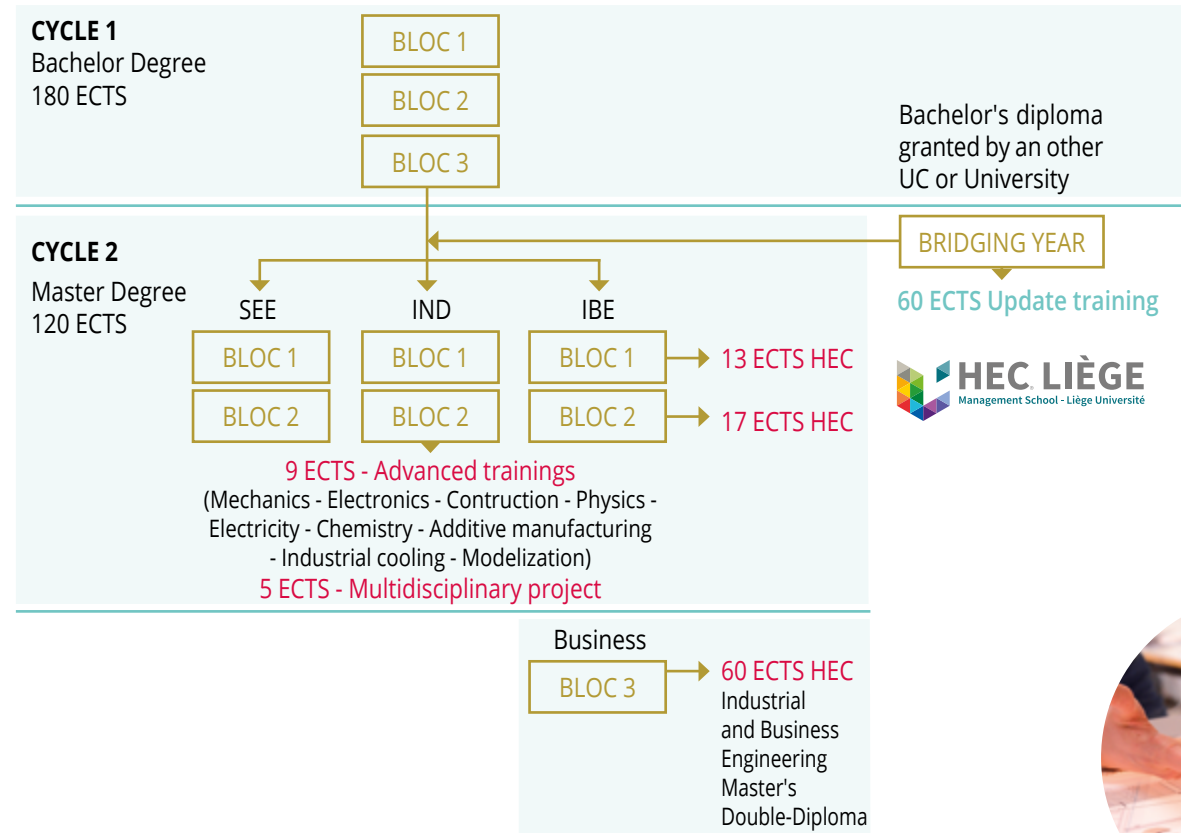




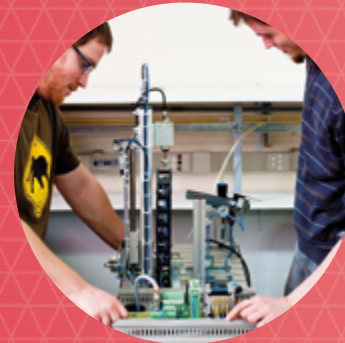
••• AT THE LEADING EDGE OF TECHNOLOGY

Industry is moving, evolving. Each manager must be surrounded by qualified, versatile and skilled key partners able to manage human complexity and quick technological changes.

In order to achieve these professional outcomes, HELMo Gramme's training is being organized in two cycles divided over 5 years:



STUDY PROGRAMMES



Bachelor

Training

These six preparatory semesters already make it possible to approach various areas of the industrial engineers' many-sided activity:

- interdisciplinarity because in the company, where the industrial engineer has to play a part of general coordination, human relationships and management are of the utmost importance,
- sciences and applied mathematics which allow to display technical creativity,
- technical know-how, essentially learning-by-doing ones.

Internship

During semester 5, a first enterprise immersion is organized. This internship lasts six weeks and is designed as an opportunity for each student to get in contact with a technical environment and to experience the complex and moving reality of the working world.

The trainee is also brought to prove his/her flexibility and ability to adapt to various situations, work or projects which will be proposed to him.

Masters

Industrial engineering sciences

This orientation, in direct drive with the industrial world, proposes traditional activities of technical training based on projects-oriented learning as well as management, economy, ethics, ... lectures crowned by an internship (minimum 13 weeks) leading to a final thesis.

A selective international partnership network in Europe (France, Spain, UK, Denmark, Czech Republic...) ensures for student and staff attractive conditions of mobility and collaboration perspectives.

Sustainable Energy Engineering orientation

This recent master has provided since 2012 a critical review on the global problem of energy supplies facing up the shortage of fossil fuels and the rise of their cost use. This academic and professional training takes stock of the most current researches and surveys in the global field of sustainable energy. Its multidisciplinary and transversal approach takes into account the various steps of the energy processing from production up to the optimization of the rational

use procedures and their linkage with social policies. It leads to much in demand career opportunities like energy production manager, energy auditor or consultant, HVAC engineers...

Double-degree - Master in Industrial & Business Engineering (unavailable for international exchange students)

Result of a close collaboration between HELMo Gramme and HEC Management School Liège, this double-diploma - unique in Belgium - allows the students to articulate in a very coherent way the skills of both trainings and to obtain two engineering degrees after only three years of Master's degree. This complementarity meets the expectations of the professional world in search of high-level collaborators having at hand robust technological, scientific and managerial skills.

The training is based on a special program fitted out from the 1st year of each Master's degree.

INCOMING STUDENTS



HELMo Gramme is registered in the European Erasmus+ and thus participates in academic student exchanges with about ten partner institutions (France, Switzerland, Spain, Denmark, Estonia, Italy, Czech Republic, South Korea, China, Canada...).

International students are welcome for a one-term or one-year academic exchange during the final year of the Bachelor's degree as well as at the Master's level. Continuous interaction with the business world and project-based learning are assets which make our training very attractive on the international scene. Increasing attention is being paid to the development of courses and modules in English both in the technical field of engineering sciences and in soft skills. For further information on the latter, please contact the international coordination whose details are given below.



The possibility of doing an internship in some of the best rated transnational companies in their field of expertise (aeronautics, chemistry, construction, mechanics, etc.) is also possible within our network of partner companies in Belgium. Students interested in such an internship must provide us with a certificate of their results as well as a letter of motivation and an updated curriculum vitae.

Research center

Applied research has always been part of the activities at HELMo's industrial engineering department. Therefore, most of its young researchers hired by HELMo's research center are coming from the Gramme Institute's benches promoting creation of innovative, sustainable and supportive devices in many and varied domains such as biomedical technology, robotics or even fashion clothing.

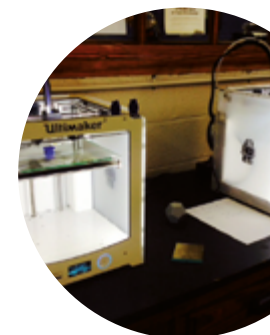
Courses given in English

Autumn Semester

	ECT
INDUSTRIAL ENGINEERING	14
Energy Conversion 2	2
Physicochemicals project	3
Web Technologies	2
Telecommunication project	2
Optimization	2
Nuclear Engineering	3
SUSTAINABLE ENERGY ENGINEERING	14
Sustainable Industrial Chemistry	4
Raw Materials & Circular economy	2
Electrical, hybrids & nonconventional propelling systems ..	2
Sustainable Energy	3
Sustainable Energy oriented projects	3
SOFT SKILLS	10
Leadership Skills	2
Philosophy of technology	2
Marketing	2
Entrepreneurship	4
French for Beginners	5
Belgian Culture and Heritage	2

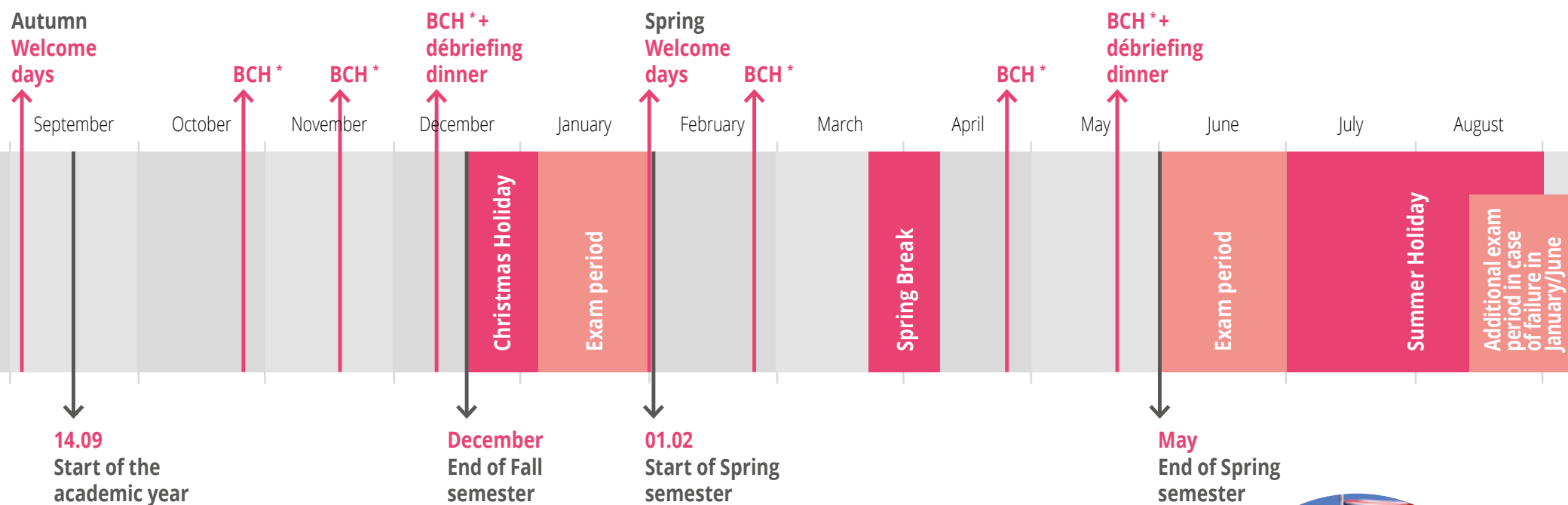
TOTAL 45

On specific request, arrangements can be made for students wishing to receive tutoring and assessment in English as part of teaching activities given in French.



PRACTICAL INFORMATION

ACADEMIC CALENDAR



* BCH = « Belgian Culture and Heritage » Activity

APPLICATION

APPLICATION DEADLINES:

> 1ST JUNE FOR THE FALL SEMESTER

> 1ST DECEMBER FOR THE SPRING SEMESTER

The **nomination** (Name + last name + study field + study period) **must be sent** by the home university to the international departmental coordinator of HELMo (see contact persons on the back cover).

After receiving the nomination, he/she will **send the Erasmus application form**. It has to be filled in and sent back to him/her.

An **acceptance letter** will be afterwards delivered (within three weeks).

HELMo **requires the Learning Agreement (LA)** before the beginning of the Erasmus stay. This has to be approved by the departmental coordinators in both institutions.



OTHER INFORMATION



1. ID, PASSPORT, VISA

It is recommended to check the website of the Belgian Diplomacy: www.diplomatie.be.

EU students need to have a valid ID or passport (check which one you need to travel to Belgium), and, depending on your nationality, home country and country of birth, a temporary stay permit.

NON EU Students need to contact the Belgian's embassy in their country, have to prove they have sufficient incomes for their stay in Belgium. They also need a copy of criminal record and a medical certificate.

2. HEALTH INSURANCE

EU students need the European health insurance card (the blue one) to be covered by the social security in Belgium.

Non EU students need to contact their home health insurance to check what kind of documents they need in Belgium in order to be covered by a social fund.

3. ACCOMMODATION

HELMo does not provide any accommodation of its own. However, the ESN will help Erasmus students find something suitable.

Accommodation for students in Liège consists usually of rooms or small flats in private houses (called « Kots ») with a private bathroom and a kitchen corner with furniture, or rooms in campus dormitories with shared bathroom and kitchen.

For further information, do not hesitate to check the following pages:
<https://www.helmo.be/CMS/Profils/International/EN/Students-IN/Pratical-information.aspx#doc>.

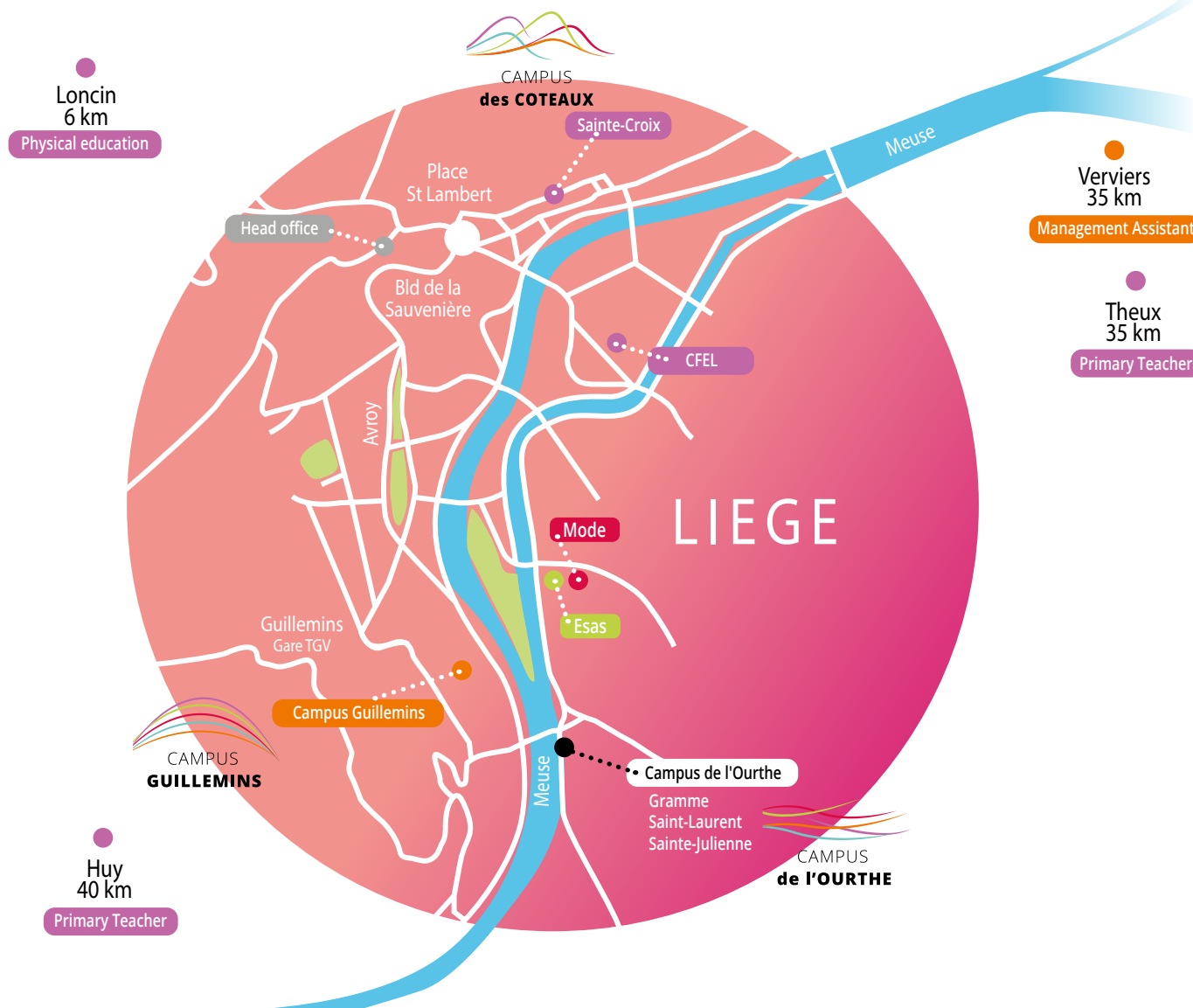
Students coming for an international week have to contact the organizer to find an accommodation for one week.

HELMo IS ALSO

Mont Saint-Martin, 45 - 4000 LIEGE
Tél.: 04/222 22 00 - Fax: 04/221 60 43
E-mail: info@helmo.be
www.helmo.be



HELMo is also 11 institutes in 5 cities



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The HELMo brochures are printed on paper made of recycled fibres and wood fibres from sustainable forest management.

HELMo is a member of:



Sectors	Fields of study	Programmes	Code	Campus	Departments	
Human and social sciences	Political and Social Sciences	Social worker	0923	HELMo ESAS	●	
		Social Engineering and Action	0923	HELMo ESAS	●	
		Spec. bachelor in Intervener in systemic family therapy	0923	HELMo ESAS + CPSE	●	
	Legal sciences and criminology	Insurance and Risk Management	0412	HELMo Campus Guillemins	●	
		Law	0421	HELMo Campus Guillemins	●	
	Economic and management sciences	Management Assistant (Liège)	0415	HELMo Campus Guillemins	●	
		Management Assistant (Verviers)	0415	HELMo Verviers	●	
		International business	0416	HELMo Campus Guillemins	●	
		Accounting	0411	HELMo Campus Guillemins	●	
		International Cooperation	0320	HELMo Campus Guillemins + HEPL	●	
		Master in Public Management	0413	HELMo Campus Guillemins + HEPL	●	
		Marketing	0414	HELMo Campus Guillemins	●	
		Master in Sales Management (work-study)	0414	HELMo + HEC-ULiège + Henallux + HEPL	●	
		Psychology and educational sciences	Preprimary Teacher	011	HELMo Sainte-Croix	●
	Primary Teacher (Liège)		011	HELMo Sainte-Croix	●	
	Primary Teacher (Huy)		011	HELMo Huy	●	
	Primary Teacher (Theux)		011	HELMo Saint-Roch	●	
	Primary Teacher adapted schedule (Loncin)		011	HELMo Loncin	●	
	Lower secondary education teacher in French as a mother tongue and French as a foreign language		011	HELMo Sainte-Croix	●	
	Lower secondary education teacher in French and religion		011	HELMo Sainte-Croix	●	
	Lower secondary education teacher in English + Dutch or English + German		011	HELMo Sainte-Croix	●	
	Lower secondary education teacher in Mathematics		011	HELMo Sainte-Croix	●	
	Lower secondary education teacher in Sciences		011	HELMo Sainte-Croix	●	
	Lower secondary education teacher in Human sciences		011	HELMo Sainte-Croix	●	
	Lower secondary education teacher in health, social and home economics		011	HELMo Sainte-Croix	●	
	Lower secondary education teacher in French as a foreign language		011	HELMo Sainte-Croix	●	
	Lower secondary education teacher in Physical education		011	HELMo Loncin	●	
	Youth worker specialised		031	HELMo CFEL	●	
	Youth worker specialised in social and sports activities		031	HELMo ESAS	●	
	Specialised bachelor in teaching children with special needs		011	HELMo Sainte-Croix	●	
	Health	Biomedical and Pharmaceutical sciences	Medical laboratory technologist	0914	HELMo Sainte-Julienne	●
			Midwife	0913	HELMo Sainte-Julienne	●
		Public Health sciences	Nurses responsible for general care	0913	HELMo Sainte-Julienne	●
Specialised bachelor in paediatrics			0913	HELMo Sainte-Julienne	●	
Specialised bachelor in mental Health			0913	HELMo Sainte-Julienne	●	
Specialised bachelor in intensive care and emergency medical aid			0913	HELMo Sainte-Julienne	●	
Master in Nursing Sciences		HELMo Sainte-Julienne + ULiège + HEPL + HERS	●			
Motricity sciences	Psychomotricity	0922	HELMo Sainte-Julienne	●		
Sciences and Techniques	Sciences	Business Informatics	0613	HELMo Campus Guillemins	●	
		Computing and systems : Automatic	0613	HELMo Saint-Laurent	●	
		Computing and systems : Systems security	0613	HELMo Campus Guillemins	●	
		Computing and systems : Robotics	0613	HELMo Saint-Laurent	●	
		Master in Computer Systems Architecture	0613	HELMo + HEPL	●	
	Engineering and technology	Industrial engineering	07	HELMo Gramme	●	
		Mechatronics and robotics (work-study)	0613	HELMo Saint-Laurent + Henallux	●	
		Industrial engineering: sustainable Energy engineering	0712	HELMo Gramme	●	
		Industrial and business engineering		HELMo Gramme + HEC-ULiège	●	
		Textile - fashion techniques	0212	HELMo Mode	●	
Techniques and sales	071	HELMo Saint-Laurent	●			



Any question? Need more? Don't hesitate! Come and visit us!



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