

BA-IRCI | BA-IRCIC | 2024-2025

## Bachelor in Engineering Sciences Option Charleroi

In order to access the Bachelor in Engineering (Civil Engineering or Architecture), students must have a certificate showing they have passed the special admission exam for this programme.

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

#### Programme mnemonic

**BA-IRCI** 

> Option Charleroi : BA-IRCIC

#### Exists also in

> Option Bruxelles: BA-IRCIB

#### Studies level

Bachelor

#### Learning language

french

#### Schedule

office hours

#### Studies category / subcategory

Sciences and technics / Sciences and technics

#### Campus

Charleroi Ville Haute

## Programme objectives

Fulfill your ambitions by gaining a grounding in the different aspects of engineering: creating, designing, producing, optimising, securing. You will develop skills ranging from scientific rigour to practical work. You will learn both know-how and interpersonal skills.

### Programme's added value

A « multitechnical » approach that enables you to gain an insight into all the theoretical and applied aspects of this field.

A very comprehensive course with a particular focus on individual study and with lectures only making up one element of the course.

It is basically the most general BA course in the French-speaking Region of Belgium

For most courses you will have at your disposal:

- > a specialist laboratory.
- > the different faculty libraries as well as the university central libraries, especially the scientific and technical library.
- > computer rooms.

## Teaching methods

As from the first block, teaching methodologies range from classical courses to projects, including exercise and laboratory sessions.

### 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

The Erasmus exchange programme usually takes place during the master's course. However, there are bilateral agreements (double

degree agreements) enabling you to study abroad from the 3rd block of the bachelor's course to the end of the 1st block of the master's course.

Some of the subsequent masters in engineering are organised jointly with VUB in English

### Job opportunities

If you go on to do a Master in Civil Engineering, you will be able to work in the following areas:

- > Corporate engineer
- > Consultant engineer
- > Research engineer

- > Production engineer
- > Engineer in a technical consultancy department.

You could also do research in applied sciences: constructions, chemistry, science of materials, physics, electricity, mechanics, information technologies, biomedical sciences

#### Contacts

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https://polytech.ulb.be/fr/les-etudes/bacheliers





# Bachelor in Engineering Sciences Option Charleroi

## Bloc 1 | BA-IRCIC | BA-IRCI

## Programme

CHIM-H1702	Chimie : science de la matière et de ses transformations   Jérôme Dohet-Eraly (Coordinator)
	⊙ 7 credits [lecture: 48h, tutorial classes: 24h, practical work: 12h]
MATH-H1700	Sciences pour l'ingénieur   Thomas LESSINNES (Coordinator)  ① 6 credits [lecture: 24h, tutorial classes: 48h]
PHYS-H1701	Physique générale   Guillaume LENOIR (Coordinator)  ⊙ 7 credits [lecture: 36h, tutorial classes: 24h, practical work: 24h]





# Bachelor in Engineering Sciences Option Charleroi

## Bloc 2 | BA-IRCIC | BA-IRCI

## Programme

NFO-H201	Programmation orientée objet   Matthieu AERSSENS (Coordinator)  ⊙ 4 credits [lecture: 18h, practical work: 30h]
MATH-H203	Mathématiques pour l'ingénieur III   Thomas LESSINNES (Coordinator)  ⊙ 5 credits [lecture: 30h, tutorial classes: 30h]
MATH-H204	Analyse numérique   Jérémy DOHET-ERALY (Coordinator)  4 credits [lecture: 24h, practical work: 24h] first term French
MECA-H202	Mécanique rationnelle II │ Charles CUVELLIEZ (Coordinator)  ⊙ 5 credits [lecture: 24h, tutorial classes: 24h, practical work: 12h]
PROJ-H201	Projet multidisciplinaire 2   Michel KINNAERT (Coordinator)  ⊙ 6 credits [workshop: 72h]
STAT-H201	Probabilités et statistiques   Thomas LESSINNES (Coordinator)  © 5 credits [lecture: 30h, tutorial classes: 30h]   second term   French





# Bachelor in Engineering Sciences Option Charleroi

## Bloc 3 | BA-IRCIC | BA-IRCI

## Programme

ECON-H3701	Controverses socio-techniques   Céline KERMISCH (Coordinator)  ② 2 credits [lecture: 24h]
ELEC-H3700	Electronique et Instrumentation   Jean-François Determe (Coordinator)  ① 4 credits [lecture: 24h, tutorial classes: 12h, practical work: 12h]
ELEC-H3704	Théorie des circuits   Jean-François Determe (Coordinator)  ① 4 credits [lecture: 18h, tutorial classes: 10h, practical work: 20h]
GEST-H3710	Fouille des données et apprentissage automatique   Olivier CAELEN (Coordinator)  ① 3 credits [lecture: 24h, tutorial classes: 12h]
INFO-H3703	Systèmes d'exploitation   Elie JESURAN (Coordinator)  ① 4 credits [lecture: 18h, tutorial classes: 30h]
MECA-H3705	Mécanique du Solide et des Structures Stéphanie STAQUET (Coordinator)  ⊙ 5 credits [lecture: 30h, tutorial classes: 24h, practical work: 6h]
PHYS-H3706	Physique des télécommunications   Jean-François Determe (Coordinator)  ① 4 credits [lecture: 24h, practical work: 12h, project: 12h]
PHYS-H3707	Signaux et systèmes de télécommunication   Jean-François Determe (Coordinator)  ① 4 credits [lecture: 24h, practical work: 12h, project: 12h]
PHYS-H3708	Circuits logiques et numériques   Jean-François Determe (Coordinator)  ① 4 credits [lecture: 24h, practical work: 12h, project: 12h]
PROJ-H3702	Projet multidisciplinaire 3   Jean-François Determe (Coordinator)  © 6 credits [lecture: 6h, project: 72h]    second term    French