



# 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

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

## 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.



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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### 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]  first and second terms  French
- MATH-H1700 **Sciences pour l'ingénieur** | Thomas LESSINNES (Coordinator)  
6 credits [lecture: 24h, tutorial classes: 48h]  first term  French
- PHYS-H1701 **Physique générale** | Guillaume LENOIR (Coordinator)  
7 credits [lecture: 36h, tutorial classes: 24h, practical work: 24h]  second term  French

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

## Programme

- INFO-H201 **Programmation orientée objet** | Matthieu AERSSENS (Coordinator)  
⌚ 4 credits [lecture: 18h, practical work: 30h] 📅 second term 🗨 French
- MATH-H203 **Mathématiques pour l'ingénieur III** | Thomas LESSINNES (Coordinator)  
⌚ 5 credits [lecture: 30h, tutorial classes: 30h] 📅 first term 🗨 French
- 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] 📅 first term 🗨 French
- PROJ-H201 **Projet multidisciplinaire 2** | Michel KINNAERT (Coordinator)  
⌚ 6 credits [workshop: 72h] 📅 second term 🗨 French
- STAT-H201 **Probabilités et statistiques** | Thomas LESSINNES (Coordinator)  
⌚ 5 credits [lecture: 30h, tutorial classes: 30h] 📅 second term 🗨 French

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

## Programme

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