



## Bachelor in Engineering : Architecture

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-IRAR

### Studies level

Bachelor

### Learning language

french

### Schedule

office hours

### Studies categories / subcategories

Art / Architecture and Sciences and technics / Sciences and technics

### Campus

Solbosch

programme in English. In the third block of bachelor, some courses are taught in English and shared with the VUB architectural engineering students.

Students success in their studies is a core objective at ULB. If you are having difficulties with a particular subject, we will provide help in the following ways:

- > additional explanations by our teaching staff and their assistants
- > specific assistance from student assistants
- > inter-faculty guidance on general topics

We invite you to discover :

- > a specialist laboratory for each discipline, providing hands-on illustrations of the subcrédits of study;
- > the faculty libraries, the university central libraries (science and technical library, architecture library), its catalogues and online specialist subscriptions.
- > several computer rooms and studio seminars.

## Programme objectives

The programme aims at a parallel development and integration of the different aspects of construction engineering and architecture; and combines scientific rigor with projects in architectural engineering design and projects of science application.

## Programme's added value

The bachelor training in architectural engineering homogenously combines engineering courses and architecture sciences and brings together staff and students in Civil Engineering and Architectural Engineering from the Brussels School of Engineering and Architecture from the Architecture Faculty at ULB.

Students follow language courses (integrated teaching with architecture oriented courses) to allow them to follow the master

## Teaching methods

From the first year onwards, the programme is presented in various teaching methods (from lectures to exercises and seminars), in which the architecture studio takes a central and dominant place.

## 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 is organized at Master level and allows students to continue their studies abroad either one term (four months) or a full academic year. The Brussels School of Engineering is also a member of the TIME network bringing together 40 of the best engineering schools in Europe. In this framework, double degree agreements were established, providing students with the opportunity to during both the third block of BA and the first block of MA study year (at the end of the MA students receive two master degrees: one from ULB and the other from the partner university).

The subsequent Master in Architectural Engineering is organised jointly with VUB. All MA courses are taught in English.

## Job opportunities

The Bachelor degree in Architectural Engineering gives access to the Master in Architectural Engineering. The Master degree allows direct access to a broad range of professions in architecture and construction engineering, among which:

- > Architectural engineer
- > Architect
- > Consultant engineer
- > Research engineer
- > Engineer in a consultancy or architecture office

The Master in Architectural Engineering also prepares for a career in research in architectural engineering or architecture.

### Contacts

 [Philippe.Bogaerts@ulb.be](mailto:Philippe.Bogaerts@ulb.be)

 +32 2 650 40 93

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

### Jury President

Philippe BOGAERTS

### Jury Secretary

Michel KINNAERT



# Bachelor in Engineering : Architecture

The study programme is based on a combination of theory lectures, exercises, seminars and architecture studios. The main teaching domains are:

- > Architecture studio and media: 67 ECTS
- > Architecture and construction sciences: 67 ECTS
- > Mathematics: 20 ECTS
- > Mechanics, physics, ...: 30 ECTS

## Bloc 1 | BA-IRAR

### Cours obligatoires

ARCH-H100	<b>Projet d'architecture I</b>   Samia BEN RAJEB (Coordinator) and Stéphane Meyrant ⌚ 20 credits [workshop: 450h, personal assignments: 150h] 📅 first and second terms 🗨️ French
ARCH-H1002	<b>Moyens d'expression I (partim) et voyage</b>   Pierre DEJASSE DE CAFMEYER (Coordinator) ⌚ 5 credits [practical work: 48h, field trips: 30h] 📅 academic year 🗨️ French
COMM-P1303	<b>Composition et représentation 1 : Théorie et critique d'architecture</b>   Pierre DEJASSE DE CAFMEYER (Coordinator) ⌚ 5 credits [lecture: 36h, tutorial classes: 12h, personal assignments: 12h] 📅 first and second terms 🗨️ French
LANG-H1001	<b>Anglais I</b>   Matthew LANGSLEY (Coordinator) ⌚ 2 credits [tutorial classes: 24h] 📅 second term 🗨️ English
MATH-H1002	<b>Analyse I</b>   Yves DE SMET (Coordinator) ⌚ 5 credits [lecture: 30h, tutorial classes: 30h] 📅 second term 🗨️ French
MATH-H1003	<b>Algèbre linéaire et géométrie</b>   Jérémy DOHET-ERALY (Coordinator) ⌚ 8 credits [lecture: 42h, tutorial classes: 54h] 📅 first and second terms 🗨️ French
MATH-H1004	<b>Eléments d'analyse</b>   Yves DE SMET (Coordinator) ⌚ 2 credits [lecture: 18h, tutorial classes: 6h] 📅 first term 🗨️ French
MECA-H100	<b>Mécanique rationnelle I</b>   Alain DELCHAMBRE (Coordinator) ⌚ 5 credits [lecture: 24h, tutorial classes: 36h] 📅 first and second terms 🗨️ French
TRAN-H100	<b>Introduction aux sciences appliquées</b>   Dimitri GILIS (Coordinator) ⌚ 8 credits [lecture: 36h, tutorial classes: 60h] 📅 first term 🗨️ French

# Bachelor in Engineering : Architecture

## Bloc 2 | BA-IRAR





















### Cours obligatoires

- ARCH-H200 **Projet d'architecture II** | Rika DEVOS (Coordinator)  
⌚ 15 credits [workshop: 450h] 📅 first and second terms 🗨 French
- ARCH-H2003 **Représentation numérique 2D/3D en architecture et informatique** | Samia BEN RAJEB (Coordinator)  
⌚ 5 credits [practical work: 60h] 📅 first term 🗨 French
- ARCH-H2005 **Théorie et Histoire de l'Architecture et voyage** | Rika DEVOS (Coordinator)  
⌚ 5 credits [lecture: 48h, field trips: 30h] 📅 first and second terms 🗨 French
- ARCH-H2006 **Moyens d'expression 2 (partim) et Anglais II** | Richard ESSEX (Coordinator) and Pierre DEJASSE DE CAFMEYER  
⌚ 5 credits [practical work: 60h] 📅 first and second terms 🗨 French
- CHIM-H2002 **Sciences des matériaux** | Stephane GODET (Coordinator)  
⌚ 5 credits [lecture: 36h, practical work: 24h] 📅 first term 🗨 French
- CNST-H2001 **Mécanique des solides et des structures** | Philippe BOUILLARD (Coordinator)  
⌚ 5 credits [lecture: 30h, tutorial classes: 30h] 📅 second term 🗨 French
- CNST-H2002 **Matériaux et construction** | Laura CERIOLO (Coordinator)  
⌚ 5 credits [lecture: 48h, practical work: 12h] 📅 academic year 🗨 French
- PHYS-H1001 **Physique générale I** | Frédéric ROBERT (Coordinator)  
⌚ 5 credits [lecture: 30h, tutorial classes: 12h, practical work: 12h] 📅 first term 🗨 French
- PHYS-H1002 **Physique générale II** | Pascal KOCKAERT (Coordinator)  
⌚ 5 credits [lecture: 30h, tutorial classes: 12h, practical work: 12h] 📅 second term 🗨 French
- URBA-P3111 **Urbanisme et géographie urbaine** | Geoffrey Grulois (Coordinator) and Benoît MORITZ  
⌚ 5 credits [lecture: 48h] 📅 first term 🗨 French

# Bachelor in Engineering : Architecture

## Bloc 3 | BA-IRAR

### Module 312

- ARCH-H300 **Projet d'architecture III** | Samia BEN RAJEB (Coordinator)  
 19 credits [lecture: 1h, workshop: 540h]  first and second terms  French
- ARCH-Y008 **Form-active structures** | Lars DE LAET (Coordinator)  
 4 credits [lecture: 12h, practical work: 36h]  second term  English
- ARCH-Y302 **Architectural and construction history of architecture pre 1850** | Stéphanie VAN DE VOORDE (Coordinator)  
 4 credits [lecture: 24h, tutorial classes: 12h, practical work: 12h]  second term  English
- CNST-H302 **Soil mechanics** | Alessia Cuccurullo (Coordinator)  
 5 credits [lecture: 24h, practical work: 36h]  first term  English
- CNST-H303 **Analyse de structures** | Didier Snoeck (Coordinator)  
 6 credits [lecture: 36h, tutorial classes: 36h]  first term  French
- CNST-H306 **Bioclimatic design** | Ahmed Zaib KHAN MAHSUD (Coordinator)  
 5 credits [lecture: 36h, practical work: 24h]  second term  English
- CNST-H311 **Technologie et comportement du béton et des matériaux cimentaires** | Stéphanie STAQUET (Coordinator)  
 5 credits [lecture: 24h, tutorial classes: 12h, practical work: 24h]  second term  French
- LANG-H300 **Anglais III et voyage** | Richard ESSEX (Coordinator)  
 2 credits [practical work: 12h, field trips: 12h]  first and second terms  English
- MECA-H3001 **Fluid mechanics and transfer processes** | Alessandro PARENTE (Coordinator) and Frédéric DEBASTE  
 5 credits [lecture: 30h, tutorial classes: 24h]  first term  English
- PROJ-H305 **Projet de conception des structures** | Didier Snoeck (Coordinator) and Alessia Cuccurullo  
 5 credits [project: 150h]  second term  French