

BA-IRAR | 2023-2024

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.

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 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 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 subjcrédits 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.

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

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



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 Kiran KATARA (Coordinator), Pierre DEJASSE DE CAFMEYER, Richard ESSEX and Matthew LANGSLEY • 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]
CNST-H2002	Matériaux et construction Jean-Yves DAL (Coordinator) and Laura CERIOLO ⊙ 5 credits [lecture: 48h, practical work: 12h]
PHYS-H1001	Physique générale I Marc HAELTERMAN (Coordinator) ⊙ 5 credits [lecture: 30h, tutorial classes: 12h, practical work: 12h]
PHYS-H1002	Physique générale II Marc HAELTERMAN (Coordinator) ⊙ 5 credits [lecture: 30h, tutorial classes: 12h, practical work: 12h]
URBA-P3111	Urbanisme et géographie urbaine Geoffrey Grulois (Coordinator) and Benoît MORITZ



Bachelor in Engineering : Architecture

Bloc 3 | BA-IRAR

Module 312

ARCH-H300	Projet d'architecture III Samia BEN RAJEB (Coordinator) ② 15 credits [workshop: 450h] ☐ first and second terms French
ARCH-Y008	Form-active structures Lars DE LAET (Coordinator) ② 4 credits [lecture: 12h, practical work: 36h]
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]
CNST-H302	Soil mechanics Alessia Cuccurullo (Coordinator) ① 5 credits [lecture: 24h, practical work: 36h]
CNST-H303	Analyse de structures Didier Snoeck (Coordinator) ① 5 credits [lecture: 36h, tutorial classes: 24h] 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]
CNST-H423	Architecture, engineering and construction project management Philippe BOUILLARD (Coordinator) ② 5 credits [lecture: 36h, practical work: 24h]
LANG-H300	Anglais III et voyage Richard ESSEX (Coordinator), David Albert BEST and Matthew LANGSLEY 2 credits [practical work: 12h, field trips: 12h] first and second terms penglish
MECA-H3001	Fluid mechanics and transfer processes Alessandro PARENTE (Coordinator), Frédéric DEBASTE and Richard ESSEX ② 5 credits [lecture: 30h, tutorial classes: 24h]
PROJ-H305	Projet de conception des structures Didier Snoeck (Coordinator) and Alessia Cuccurullo