

Design project competition

Lecturers

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Course mnemonic

PROJ-H502

ECTS credits

4 credits

Language(s) of instruction

English

Course period

Second term

Campus

Solbosch

Course content

The participants of the design project competition are placed in a **real-life context of developing a real-estate operation** (commercial real estate (offices, retail, warehouse, hotel, senior housing, ...), residential real estate, infrastructure or private-public partnership for mixed activities).

The competition consists in addressing a **private or public call for tender**: infrastructure (public parking, bridges, tunnels), **public urban renovation, existing property refurbishing or sale and leaseback operations** (offices or industrial warehouses).

The competition itself is organised over a **short period** (typically 2 to 3 days) with a **multidisciplinary team of 5 to 6 students** (at least one student originating from these 4 degrees: MSc in Architectural Engineering, MSc in Civil Engineering, MSc in Business Engineering).

A fictitious but real-life **call for tender** is given at the beginning of the competition, containing: a brief statement describing the call, the competition regulations (including the selection criteria), the technical programme, the administrative requirements, the tender documentation, references to the literature related to similar operations.

The team has to elaborate and submit a bid containing the architectural sketches of the solution and a financial plan supported by operation planning. The bid is then presented and supported in front of a committee composed of practitioners. The bid must therefore cover 3 main aspects: the **technical submission** in the form of **sketches** which must meet the requirements of the **programme**; an **economical business plan**, including operation planning; and a **commercial presentation**.

Objectives (and/or specific learning outcomes)

This module aims at training the students on non-technical skills related to real-estate development projects: bidding process, legal, economic and financial aspects, scheduling, submitting and presenting the project to a selection committee, self-reflection on their personal development.

By the end of the module, the student should be able to:

- 1 To analyse and synthesise a call for tender for a real-estate development project, including technical, administrative and financial prescriptions
- 2 To analyse a specific architectural and urban context (typologies, urban development plan, spatial and temporal complexity, heritage, mobility)
- 3 To elaborate comprehensive real-estate development project pre-design solution(s), including the business plan
- 4 To work in a multidisciplinary and multicultural designing team
- 5 To present and support their project in front of a professional selection committee
- 6 To plan and organise a multidisciplinary designing team over a very short period of time
- 7 To self-assess his/her own personal development in a reflective summary

Pre-requisites and co-requisites

Required knowledge and skills

Background in architectural, urban or civil engineering design.

Being interested in non-technical aspects related to real-estate project development.

Teaching method and learning activities

12h lectures: 6 seminars covering:

- 1 Rules of the game
- 2 Introduction to the Real Estate Market
- 3 Property Valuation
- 4 The Tenant's Perspective
- 5 City Planning in the 3 Regions
- 6 Public-Private Partnerships and Public Contracts
- 7 Real Estate and Sustainable Development
- 8 Construction Costs / Exit Price
- 9 Management Aspects of a Real Estate Project

1h presentation + 100h teamwork: the design project competition

4h studio: A design studio: debriefing and discussion about the projects

Contribution to the teaching profile

(This section refers to the programme learning outcomes. Their definition is not the responsibility of the module coordinator who is only referring to them).

This module contributes to the following overall programme learning outcomes:

- > In-depth knowledge and understanding of integrated structural design methods in the framework of a global design strategy
- > reformulate complex problems in order to solve them (simplifying assumptions, reducing complexity)
- > present and defend results in a scientifically sound way, using contemporary communication tools, for a national as well as for an international professional or lay audience
- > collaborate in a (multidisciplinary) team
- > think critically about and evaluate projects, systems and processes, particularly when based on incomplete, contradictory and/or redundant information
- > a creative, problem-solving, result-driven and evidence-based attitude, aiming at innovation and applicability in industry and society
- > a critical attitude towards one's own results and those of others
- > the consciousness of the ethical, social, environmental and economic context of his/her work and strives for sustainable solutions to engineering problems including safety and quality assurance aspects
- > the flexibility and adaptability to work in an international and/or intercultural context
- > an attitude of life-long learning as needed for the future development of his/her career

References, bibliography and recommended reading

None.

Course notes

Podcast and Université virtuelle

Other information

Place(s) of teaching

Solbosch

Contact(s)

BATir Dept., CP 194/2, C Building, Ave Buyl 87, 5th floor, room SC5-206, E-mail: Philippe.Bouillard@ulb.be.

Evaluation method(s)

Oral presentation, Project, Group work and Written report

Evaluation method(s) (additional information)

Final project: submission of the bid addressing the call for tender and the architectural and urban context. (LOs 1, 2, 3)

Presentation of the project in front of a review committee (LOs 3, 4, 5)

A personal summary (2 pages) describing how the design team and work have been organised, a discussion on the debriefing design studio and a self-assessment of the student's own contribution and personal development. (LOs 6, 7)

Determination of the mark (including the weighting of partial marks)

Final project: 40%

Presentation: 40%

Summary: 20%

Main language(s) of evaluation

English

Programmes

Programmes proposing this course at the Brussels School of Engineering

MA-IRAR | **Master of science in Architecture and Engineering** | finalité Professional/unit 2 and MA-IRCN | **Master of science in Civil Engineering** | finalité Professional/unit 2

Programmes proposing this course at the faculty of Sciences

MA-GEOG | **Master in Geography : General** | finalité Urban studies (ULB-VUB)/unit 1 and finalité Urban studies (ULB-VUB)/unit 2

