

# Composition et Représentation 2

## Lecturers

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## Course mnemonic

COMM-P2103

## ECTS credits

5 credits

## Language(s) of instruction

English and French

## Course period

First term

## Campus

Solbosch

## Course content

### Computer graphics (4 ECTS)

- > 2D vector modelling.
- > 3D vector modelling.
- > Advanced image processing complements
- > Introduction to 3D rendering
- > Vector modelling to raster image enhancements.
- > What's next, short overview: BIM, parametric modelling, scanning and 3D printing, Virtual and Augmented Reality, Geographic Information System,....

### English applied to architecture (1 ECTS)

2 semesters, 2 x 1 ECTS in total

Students are responsible for organizing themselves, but are expected to work for 30 hours per semester.

During the information and introduction sessions, students will create their learning contract, which lists all the activities they will do as part of their participation in the program

## Objectives (and/or specific learning outcomes)

### Computer graphics

At the end of this unit, a student will be able to manage computer graphics and 2D and 3D architectural modelling tools in order to:

- > Draw orthographic views (planes, sections, elevations) using vector modellers.
- > Enhance the quality of documents with image processing
- > Master scale throughout the production process.
- > Model any shapes in 3D.

- > Produce simple renderings.
- > Mix real and virtual images.
- > Compose an architectural presentation that mix with relevance different graphic techniques, digital or not, so that they reinforce each other.

Apply these learning outcomes to the project by adopting a reflective practice regarding communication tools and in particular computer tools. Avoid any confusion between tools and objectives. Determine in a reasoned way the appropriate tools according to the nature of the objectives in a sequence of creation or production.

Understand the very nature of computer graphics "objects", before, most often intuitively, learning processes and methods.

### English applied to architecture (1 ECTS)

- > The basics of English grammar
- > Pronunciation rules and difficulties
- > Vocabulary
- > Taking part in a studio
- > How to read and listen to a text effectively

## Teaching method and learning activities

### Computer graphics

- > Ex cathedra presentation of theoretical elements, demonstrations for the most delicate elements to master, examples/illustrations.
- > Online tutorials allowing asynchronous learning.
- > Planned assistance to help students to carry out their personal work

### English applied to architecture

Students will have access to different units online made up of videos and exercises.

Face-to-face sessions and workshops will also be organized throughout the year to further develop and consolidate the online guided study and the student's individualized self-study as well as for the teacher and students to check in with each.

The Portfolio is the tool which the students will use to record and show evidence of all the language learning activities they have done throughout the year. It can be in various forms according to the student's preferences, such as: a simple computer file, a written bullet journal, or a web page.

## Contribution to the teaching profile

### Common CG & English

Interact with all stakeholders

### Computer Graphics

Develop a spatial response.

- > Demonstrate, in the practice of the project, the complementarity of ATTITUDES (make sense: "the Why?") and APTITUDES (know-how: "the How?")
- > Develop and implement a work methodology, a design process, experimental and iterative, individual or collective.
- > Master the issues of sizing and use.

Interact with all stakeholders

- > Use representation tools (in 2D and 3D) as means of exploration, development, and transmission of the project.
- > Develop a visual identity to compose coherent, explicit and attractive graphic presentations.

Demonstrate a reflective attitude

## Course notes

Université virtuelle and Podcast

## Other information

### Place(s) of teaching

Solbosch

### Contact(s)

Computer graphics and modeling: Philippe Lecocq: mail, UV, Teams, permanences

## Evaluation method(s)

Personal work

### Evaluation method(s) (additional information)

#### Computer graphics

The evaluation of all the work carried out during the term is done during the exams session. It includes:

- > An objective part that is based on intermediate deadlines whose technical criteria are fully detailed in an evaluation checklist.
- > A subjective part that focuses on the quality of a "jury level document" where the range of learning is implemented (without looking at technical requirements).

#### English applied to architecture

This learning activity does not evaluate the level of English attained at the end of the program. Instead a grade will be given based on:

- > task achievement of and participation in 60 hours of autonomous language learning.
- > an evaluation of the content and quality of activities documented in the portfolio
- > an evaluation during the check-out session of the development of the student's skills in English (speaking, reading, writing, and/or listening), taking into account the goals agreed on and fixed in the individual learning contract as established during the check-in session
- > development of awareness of their learning skills and the putting into practice of self-evaluation practices

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

### Global Unit Mark :

- > Weighted arithmetic average : Computer Graphics 80%, English 20%

### Computer Graphics details:

- > Technical mark (from -50% to 50%): each deficiency in relation to the checklist reduces the score. It is possible to get a negative rating for this part.
  - > Vector 2D board, drawing standards, enhancement in image processing: from -20% to 20%
  - > 3D model including rendering from -20% to 20%
  - > In situ 3D model editing: from -10% to 10%
- > Qualitative mark, final presentation 50%
- > Thus, it means that a wonderful quality work will not be able to compensate highly deficient technical parts. The aim is to avoid students to bypass the expected methods and tools even if they provide good results by other means.

## Main language(s) of evaluation

French and English

## Programmes

Programmes proposing this course at the faculty of Architecture La Cambre Horta

BA-ARCH | Bachelor in Architecture | unit 2

