

Post-war history of construction and architecture

Titulaire

Rika DEVOS (Coordonnateur)

Mnémonique du cours

ARCH-H406

Crédits ECTS

4 crédits

Langue(s) d'enseignement

Anglais

Période du cours

Premier quadrimestre

Campus

Solbosch et Hors campus ULB

Contenu du cours

The course of "Post-war history of construction and architecture" is based on current tendencies, concepts and methods prevalent in the disciplines dealing with post-WWII history of construction and architecture. The recurrent theme is determined by the broad and decisive changes instigated by the introduction of new technologies, methods (tools) and ideals in the fields of architecture, construction and building in the period 1945-1980. The course is built on thematic sessions, each with a specific focus in theme, time and place. Examples: Reconstruction; Ideals; -isms; Fairs & Politics; Historiography; Countercultures; etc.

A selection of these new post-war technological and post-war "tools" and "ideals" will be treated in detail, confronting students with the interweaving of fields of knowledge and their interdisciplinary approach. Among these "tools": prefabrication, plastics, lightweight building (tensegrity, 3D frames, tensile structures), modern wood, new requirements in comfort, media, ... Among these "ideals": scarcity; optimisation; systems thinking; team design; pluralism; green building; autonomy; etc. The approach is not limited to the "tools" and "ideals" themselves, but also deals with their broader interaction with social and economic issues, political tendencies, professional ideals and disciplinary boundaries.

Objectifs (et/ou acquis d'apprentissages spécifiques)

The course introduces students to both the histories and the historiographical practices of construction and architecture history and invites to critically assess their differences and overlaps.

As such, the course aims:

(1) at offering general knowledge on relevant historical facts, their complex relations and impact and their interrelated historiographies;

(2) at developing a critical understanding of research in the contemporary histories of construction and architecture;

(3) at training students in scientific research, reading and writing, based largely on a delineated, but broad corpus of primary texts.

On completion of this module students are aware of the current topics and research methods in post-war history of construction and architecture. They are able to engage in research activities such as critical reading, bibliographic research (journals, books, databases and when applicable: archives) and written and oral, critical assessment of a defined topic in post-war construction and/or architecture history.

Pré-requis et co-requis

Connaissances et compétences pré-requis

history of interwar modernism in architecture (weak prerequisite)

interwar history of construction (weak prerequisite)

Méthodes d'enseignement et activités d'apprentissages

Ex cathedra teaching (about 12 sessions) of variable length, by the titular and/or guests, on campus or extra muros (public lectures).

Autonomous study based on reader and reading of texts (available), followed by free discussion.

Collective critical reading (in groups).

Scientific research and writing (paper) with weekly guidance (in group) and peer review.

Presentations by students (in group).

Introduction to research and writing (in group, exercises).

All course materials are available on the Université Virtuelle platform (UV). Students need to get access to the platform (no exceptions) before the second class.

On the UV you will find <https://uv.ulb.ac.be>:

- > slides shown in class (all classes)
- > syllabus
- > further documentation (texts, projects)
- > relevant links to websites
- > all documentation for all exercises
- > submission modules for all exercises
- > exam information

Contribution au profil d'enseignement

This teaching unit contributes to the following competences:

- > conceive, plan and execute a research project, based on an analysis of its objectives, existing knowledge and the relevant literature, with attention to innovation and valorisation in industry and society
- > correctly report on research or design results in the form of a technical report or in the form of a scientific paper
- > 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
- > 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
- > 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
- > architectural sciences and sustainable design methods and theories with the specificity of their application to complex architectural and urban design projects
- > critically analyse and reflect on the historical and theoretical context of architectural and urban projects

Références, bibliographie et lectures recommandées

ADDIS, Bill. *Building: 3000 years of design engineering and construction*. London: Phaidon, 2007

ARNOLD, Dana, Elvan Altan ERGUT and Belgin TURAN ÖZKAYA, eds., *Rethinking Architectural Historiography*, New York: Routledge, 2006

BANHAM, Reyner, *The architecture of the well-tempered environment*. London: Architectural press, 1969

BRAHAM, William W. & Jonathan A. HALE. *Rethinking Technology. A Reader in Architectural Theory*. New York: Routledge, 2007

CURTIS, William J. *Modern architecture since 1900*. London: Phaidon, 1982.

WILLIAMS GOLDHAGEN, Sarah & Réjean LEGAULT, eds. *Anxious Modernisms. Experimentation in Postwar Architectural Culture*. Montreal/Cambridge: CCA/MIT Press, 2000.

FANELLI, Giovanni and Roberto GARGIANI, *Histoire de l'architecture moderne. Structure et revêtement*. Lausanne: Presses polytechniques et universitaires romandes, 2008.

FRAMPTON, Kenneth. *Studies in tectonic culture: the poetics of construction in nineteenth and twentieth century architecture*. Chicago: Graham foundation for advanced studies in the fine arts, 1995.

GARGIANI, Roberto, ed. *L'architrave, le plancher, la plate-forme. Nouvelle histoire de la construction*. Lausanne : Presses polytechniques et universitaires romandes, 2012.

PICON, Antoine, ed. *L'art de l'ingénieur: constructeur, entrepreneur, inventeur*. Paris: Le Moniteur, 1997.

Support(s) de cours

Syllabus et Université virtuelle

Autres renseignements

Lieu(x) d'enseignement

Solbosch et Hors campus ULB

Contact(s)

Email for appointments: Rika.Devos@ulb.be
Service BATir : Av. Buyl, 87, bâtiment C, 5ième étage.
Tél: 02/650 65 53

Méthode(s) d'évaluation

Autre, Examen oral, Présentation orale, Travail de groupe et Rapport écrit

Examen oral

Question ouverte à réponse courte, Question visuelle et Question ouverte à développement long

Examen avec préparation

Méthode(s) d'évaluation (complément)

Students are evaluated on the basis of various assignments, with intermediate submissions and discussions. The final, major assignment is the writing of a scientific paper, in group, to be presented in one of the last sessions. Students also engage in a peer review procedure during this process.

Students are evaluated on the course content by oral examination (on campus or online).

Construction de la note (en ce compris, la pondération des notes partielles)

Oral exam: 50%

Paper, presentation and various assignments: 50%

Second session: If the student does not pass, both aspects have to be repeated (paper and oral exam), even if the student was successful in one of the parts. Students need to check online (université virtuelle) how to proceed for the assignment of the 2nd session: contact the teacher early July (start-up, nor guidance in August possible).

Langue(s) d'évaluation principale(s)

Anglais

Programmes

Programmes proposant ce cours à l'école polytechnique de Bruxelles

MA-IRAR | Master : ingénieur civil architecte | finalité Spécialisée/ bloc 1

Programmes proposant ce cours à la faculté des Sciences

MA-GEOG | Master en sciences géographiques, orientation générale | finalité Urban studies/bloc 1 et finalité Urban studies/bloc 2

