

## Course guide

### 210739 - IAA - Environmental Impact of Architecture

**Last modified:** 15/07/2024

**Unit in charge:** Barcelona School of Architecture  
**Teaching unit:** 753 - TA - Department of Architectural Technology.

**Degree:** MASTER'S DEGREE IN ADVANCED STUDIES IN ARCHITECTURE-BARCELONA (Syllabus 2015). (Optional subject).

**Academic year:** 2024    **ECTS Credits:** 5.0    **Languages:** Spanish

#### LECTURER

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**Coordinating lecturer:** ANNA PAGES RAMON

**Others:** Segon quadrimestre:  
ANNA PAGES RAMON - AEMA2

#### TEACHING METHODOLOGY

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[Go to Spanish or Catalan version](#)

#### LEARNING OBJECTIVES OF THE SUBJECT

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#### STUDY LOAD

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Type	Hours	Percentage
Self study	87,5	70.00
Hours large group	37,5	30.00

**Total learning time:** 125 h

## CONTENTS

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### title english

**Description:**

Relations between sustainability and architecture. The perception of edges. The definition of sustainability. The Brundtland report. Sustainability and economy. Physic sustainability. The necessary condition. Material flows on architecture. Domestic residues. Materials of construction. The energy. The water. Sustainability measures.

Furthermore, there are two more special sessions:

- In the first one, every student must propose the work that he is going to execute during the three weeks course.
- In the second one, the bibliography of the course is presented

**Specific objectives:**

To contribute in giving a definition of sustainable architecture based on the theoretical development created by the statement of the Brundtland report. To analyze the main characteristics of the resulting architecture and the investigation fields ready to developed.

The main objective is to make every participant able of reaching a perfect control of the analysis and evaluation of constructive behaviour in architecture, to finally evaluate its environmental impact. At the same time, it's considered important to use properly techniques that fit on every case presented in the course.

**Full-or-part-time:** 125h

Theory classes: 15h

Laboratory classes: 30h

Self study : 80h

## GRADING SYSTEM

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Continuous evaluation (%) Final evaluation (%)

SE05 Continuous evaluation 20

SE08 Delivered work marks 60

SE010 Projects evaluation 20

(Evaluation system combination)

Continuous evaluation of accomplished work, with a 20% for course's work, 50% for final work and an additional 30% for attitude and expression capacity during the whole academic phase of the course.

## BIBLIOGRAPHY

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**Basic:**

- Bettini, V. Elementos de ecología urbana. Madrid: Trotta, 1998. ISBN 8481642614.
- Planeamiento urbanístico: de la controversia a la renovación. Barcelona: Diputació de Barcelona, 2003. ISBN 8477949352.

**Complementary:**

- Metodología para la comparación de elementos de construcción en función de su impacto ambiental. Barcelona: UPC, 2004.
- Infraestructures de transport i territori. Barcelona: Diputació de Barcelona; Societat Catalana d'Ordenació del Territori, 2002. ISBN 8477948534.
- Nel, O. Ciutat de ciutats: reflexions sobre el procés d'urbanització a Catalunya. Barcelona: Empúries, 2001. ISBN 8475968031.
- Environmental Resource Guide. New York: John Wiley & Sons, 1996. ISBN 0471140430.
- World Resources. Madrid: Banco Interamericano de Desarrollo, 1996.