

**COURSE DATA****Data Subject**

Code	33907
Name	Industrial Architecture
Cycle	Grade
ECTS Credits	6.0
Academic year	2022 - 2023

Study (s)

Degree	Center	Acad. year	Period
1006 - Degree in History of Art	Faculty of Geography and History	4	Second term

Subject-matter

Degree	Subject-matter	Character
1006 - Degree in History of Art	8 - Contemporary art and media	Optional

Coordination

Name	Department
BESO ROS, ADRIAN	230 - Art History

SUMMARY

In this subject we will try to approach the richness and diversity of typologies of architecture related to industrial production processes. This includes, in addition to the factory buildings themselves, all those typologies produced with industrial techniques and materials and which are typical of the industrial society, among which we find workers' colonies, communication networks, collective facilities, etc. The impact of industrialisation on the territory and on architecture will be analysed and a tour will be made of the different architectural typologies classified by sectors, considering for each of them a diachronic evolution of the type in relation to various aspects, such as the changes in the materials used in construction or the energy sources used in the production process.

Based on this conceptual approach and understanding its cultural value, the different aspects related to the management of this specific heritage will be addressed, such as the regulations and legislation that grant it protection, study and research, conservation and recovery and, finally, dissemination for the knowledge and appreciation of the public.



PREVIOUS KNOWLEDGE

Relationship to other subjects of the same degree

There are no specified enrollment restrictions with other subjects of the curriculum.

Other requirements

There are no prerequisites for this subject. However, it is advisable to have a basic knowledge of the history of contemporary architecture and the history and management of artistic heritage.

OUTCOMES

1006 - Degree in History of Art

- Be able to analyse and synthesise information from the various contents of art history and to apply it to professional practice.
- Be able to apply the basic knowledge acquired by means of applying critical reasoning to the analysis and assessment of alternatives.
- Be able to apply basic knowledge to future professional situations through appropriate organisation and planning of the contents of art history.
- Be able to present management and dissemination projects in all fields of art history, both orally and in writing.
- Make direct contact with artistic works through visits to historical monuments, museums and exhibitions that show this type of work to the public.
- Be able to design an integral project for the management of artistic property, from its knowledge to its social exploitation.
- Be able to assess artistic production under the perspective of sustainability, forging values and attitudes that contribute to the sustainable development of the environment.
- Be acquainted with contemporary art.
- Be acquainted with historical-artistic heritage.
- Have systematic and integrated knowledge of the artistic product, through the analysis of the different languages, procedures and techniques of artistic production throughout history.
- Have an updated knowledge of bibliography and ability to analyse it critically, and be able to make a synthesis from a critical stand.
- Be able to use the knowledge acquired to formulate hypotheses, make summaries and draw orderly conclusions.
- Show motivation for quality through a personal ethical commitment to the professional environment.



LEARNING OUTCOMES

Students should know the particularities and characteristics of industrial architecture, know how to recognise and analyse the different typologies, classify them and assess them in relation to their historical and artistic context.

To be able to recognise the heritage values of this architecture in relation to its environment, as well as the management mechanisms based on research, conservation and dissemination.

DESCRIPTION OF CONTENTS

1. INDUSTRIAL ARCHITECTURE. DEFINITION AND CHARACTERISTICS

The industrial revolution. The concept of industrial heritage and its formation. Definition of industrial architecture. Characteristics. Materials. Aesthetics. Architecture in the framework of an integral definition of industrial heritage.

2. ARCHITECTURAL TYPOLOGIES. THE PRODUCTIVE SECTORS

Typologies of factories. The production of capital and consumer goods (mining, iron and steel, textiles, paper, construction materials). Agri-food production (wineries, orange architecture, flour and rice industries). Energy production (gas, electricity, thermal, nuclear).

3. ARCHITECTURAL TYPOLOGIES. CITY AND HOUSING

Drinking water supply. Architecture for supply (markets and slaughterhouses). School architecture. Prison architecture. Workers' housing. Cemeteries.

4. ARCHITECTURAL TYPOLOGIES: TRANSPORT, COMMUNICATIONS AND PUBLIC WORKS

Railways (stations, tunnels, bridges, auxiliary installations...). Roads (roadmen's houses, bridges...). Optical telegraph. Lighthouses. The cultural value of historic linear infrastructures.

5. REGULATIONS AND LEGISLATION

International reference documents (Nizhny Tagil Charter on Industrial Heritage, Dublin Principles). State documents (National Plan for Industrial Heritage, Bierzo Charter). Industrial heritage in regional legislation.

**6. RESEARCH AND STUDY OF INDUSTRIAL ARCHITECTURE**

Sources: Archives, newspaper libraries, guides and yearbooks, statistical sources, cartography, photographic collections, oral memory. Applied research: inventories and catalogues. Evaluation criteria.

7. RESTORATION OF INDUSTRIAL ARCHITECTURE

Criteria. Industrial museums. Spaces for artistic events. Commercial spaces. Educational spaces. Multifunctional spaces. Residential complexes. Administrative complexes. New urban spaces.

8. DISSEMINATION OF INDUSTRIAL ARCHITECTURE AND LANDSCAPE

Industrial museums. Science and technology museums. Cultural parks. European routes. Routes and greenways. Industrial tourism.

WORKLOAD

ACTIVITY	Hours	% To be attended
Theory classes	45,00	100
Classroom practices	15,00	100
Attendance at events and external activities	15,00	0
Development of group work	2,00	0
Development of individual work	18,00	0
Study and independent work	20,00	0
Readings supplementary material	10,00	0
Preparation of evaluation activities	10,00	0
Preparing lectures	5,00	0
Preparation of practical classes and problem	5,00	0
Resolution of case studies	5,00	0
TOTAL	150,00	

TEACHING METHODOLOGY

The course is structured around the following points:

a) Three hours of face-to-face classes per week:

These are theoretical-practical lessons given by the lecturer, using visual media, in which the essential aspects of the subject are presented, systematizing the bibliography. The practical component will be carried out in these face-to-face classes, which may include the commentary and analysis of texts or images related to the subject.



b) Attendance at seminars, guided visits or other activities:

This section may include compulsory attendance by students at activities organized by the teacher. These activities will be determined by the number of students in the group.

c) Attendance to tutorships:

The student will be able to attend during the hours of attention to the students that the professor has established, to make consultations on any subject or aspect related to the subject and the professor will be able to arrange the realization of programmed tutorships when he considers it convenient.

EVALUATION

Written test:

Theoretical-practical written test at the end of the four-month period in which the following are assessed:

- Acquisition of knowledge
- Understanding of the historical and cultural processes in which the different artistic manifestations are inscribed.
- Ability to argue and present an orderly and coherent discourse.
- Knowledge of the vocabulary and terminology specific to Art History.

This constitutes a percentage of 60% of the total grade.

Reading control/memorandum of activities:

Written tests, reports, summaries and diagrams of the bibliography provided and of the complementary activities proposed in the training activities section.

The following are assessed:

- Acquisition of knowledge.
- Understanding of the general and specific bibliography of the different subjects.
- Ability to prepare reports and/or written reports on the complementary activities proposed in the training activities section (visits to buildings, ensembles, landscapes, museums, etc.).
- Acquisition of an analytical and critical spirit of the bibliography and sources used by the History of Art.

This constitutes a percentage of 10/20% of the total grade.



Individual and/or group practical work:

Individual and/or group work, written and/or oral, where the following are assessed:

- Acquisition of bibliographical research and information skills.
- Mastery of the general and specific bibliography of the different subjects.
- Ability to argue and present an orderly and coherent discourse.
- Elaboration of analyses and proposals for the interpretation of the work of art.
- Acquisition of a scientific methodology specific to Art History.
- Analysis and interpretation of the artistic fact in relation to documentary, literary and visual sources, etc.
- Acquisition of instrumental knowledge applied to Art History.

It constitutes a percentage of 20/30% of the total qualification.

In summary:

WRITTEN TEST 60%.

READING CONTROL/ACTIVITY REPORT 10 / 20%.

INDIVIDUAL AND/OR GROUP PRACTICAL WORK 20 / 30%.

It is necessary to obtain at least 40% of the mark of the written test to pass the subject, that is to say, at least a 4 out of 10.

In the second sitting there is no repetition of any type of work or reading control, only the exam is taken

REFERENCES

Basic

- AGUILAR CIVERA, Inmaculada: Arquitectura industrial. Concepto, método y fuentes. València: Museu d'Etnologia, 1998.
- BENÉVOLO, L.: Historia de la Arquitectura Moderna. Barcelona: Gustavo Gili, 1994.
- BESÓ ROS, Adrià: El patrimoni arquitectònic industrial valencià. Revista Valenciana d'Etnologia, 3 (2008), p. 43-72.



- BIEL IBÁÑEZ M^a Pilar; CUETO ALONSO, Gerardo J. (coords): 100 elementos del patrimonio industrial en España. Madrid: TICCIH, 2011.
- CERDÀ, Manuel; GARCÍA BONAFÉ, Mario: Enciclopedia valenciana de arqueología industrial. València: Edicions Alfons el Magnànim-Diputació de València, 1995.
- CLAVER GIL, Juan; SEBASTIÁN PÉREZ, Miguel Ángel: Aproximación y propuesta de análisis del patrimonio industrial inmueble español. Madrid: UNED, 2016.
- SOBRINO, Julián: Arquitectura industrial en España, 1830-1990. Madrid: Cátedra, 1996.
- NAVASCUÉS, Pedro. Arquitectura e ingeniería del hierro en España (1814-1936). Madrid: Fundación Iberdrola, 2007.
- PEVSNER, Nikolaus: Historia de las tipologías arquitectónicas. Barcelona, Gustavo Gili, 1979.
- Plan Nacional de Patrimonio Industrial. Disponible en: <https://links.uv.es/vYCC1nk>
- VV.AA., La arquitectura de la industria, 1925-1965, Registro DOCOMOMO Ibérico, Barcelona, 2005.

Additional

- AGUILAR CIVERA, Inmaculada: Historia de las estaciones. Arquitectura ferroviaria en Valencia. València: Diputació de València, 1984.
- AGUILAR CIVERA, Inmaculada: La estación de ferrocarril, puerta de la ciudad. València: Conselleria de Cultura i Educació, 1988.
- AGUILAR CIVERA, Inmaculada: El orden industrial en la ciudad. Valencia en la segunda mitad del siglo XIX. València: Diputació de València, 1990.
- AGUILAR CIVERA, Inmaculada: Cien elementos del paisaje valenciano. Las obras públicas. València. Conselleria d'Infraestructures i Transport, 2005.
- ÁLVAREZ ARECES, Miguel Ángel (coord.): Rutas culturales y turísticas del patrimonio industrial. Gijón: CICEES, 2004.
- ÁLVAREZ ARECES, Miguel Ángel (coord.): El legado de la industria: archivos, bibliotecas, fototecas de empresa. Fábricas y memoria. Gijón: INCUNA, 2016.
- ÁLVAREZ ARECES, Miguel Ángel (ed.): Patrimonio Industrial Agroalimentario. Testimonios cotidianos del diálogo intercultural. Gijón: CICEES, 2009.
- ÁLVAREZ ARECES, Miguel Ángel; BLANCO AGÜEIRA, Silvia; DEL RÍO VÁZQUEZ, Antonio S. (eds.): El patrimonio industrial en el contexto de la sostenibilidad. Gijón: CICEES, 2017.
- ARROYO SERRANO, Santiago; GIMÉNEZ PRADES, María; SÁNCHEZ MUSTIELES, Diana: Conservación y restauración del patrimonio industrial. Madrid: Síntesis, 2018.
- ARACIL, Rafael, CERDÀ, Manuel; GARCÍA BONAFÉ, Mario: Arqueología Industrial en Alcoy. Alcoi: Ajuntament d'Alcoi, 1980.
- BESÓ ROS, Adrià: Las planimetrías del Instituto Geográfico Nacional como fuente para la documentación histórica del patrimonio de la obra pública y del paisaje construido. Erph. Revista electrónica de patrimonio histórico, 22 (2018), p. 184-209.



- BESÓ ROS, Adrià: Arroz, naranjas y vino. Una aproximación a los paisajes valencianos de la Revolución Industrial y a su patrimonio construido. En IV Seminario internacional sobre patrimonio de la arquitectura y la industria. Paisaje y patrimonio de la industria de la alimentación. Madrid: UPM, 2017, p. 101-123.
- BESÓ ROS, Adrià: Larquitectura del vi. En Inmaculada AGUILAR CIVERA (dir.): Historia del ferrocarril en las comarcas valencianas. La plana de Utiel-Requena. València: Conselleria dInfraestructures i Transports, 2008, p. 181-200.
- DOMÉNECH ALCOVER, Eduardo: Larquitectura dels magatzems de taronja en La fruta dorada. La industria española del cítrico 1781-1995. València: Conselleria de Cultura, Educació i Ciència, 1996, p. 89-120.
- GARCÍA PÉREZ, Joel: Arquitectura industrial en Alcoy. Siglo XIX. Alacant: Institut de Cultura Juan Gil-Albert, 2001.
- GIRONA RUBIO, Manuel; VILA VICENTE, José: Arqueología industrial en Sagunto. València, Institució Alfons el Magnànim, 1991.
- MARTÍN MARTÍNEZ, José: Urbanismo y arquitectura industrial en el Puerto de Sagunto (1907-1936). Sagunt: Caixa dEstalvis de Sagunt, 1991.
- PERIS, Diego (coord.): Arquitectura para industria en Castilla-La Mancha, Toledo: Junta de comunidades de Castilla la Mancha, 1995.
- VIDAL VIDAL, Vicente Manuel: Arquitectura e industria. Un ensayo tipológico de los edificios fabriles de lAlcoià. València: Conselleria dObres Públiques, 1988.
- VVAA: Dos siglos de industrialización en la Comunitat Valenciana. València: Colegio Oficial de Ingenieros Superiores Industriales de la Comunidad Valenciana, 2007.