

29986 - History of Technology and Architecture

Syllabus Information

Academic Year: 2019/20

Subject: 29986 - History of Technology and Architecture

Faculty / School: 110 - Escuela de Ingeniería y Arquitectura

Degree: 436 - Bachelor's Degree in Industrial Engineering Technology
440 - Bachelor's Degree in Electronic and Automatic Engineering
434 - Bachelor's Degree in Mechanical Engineering
558 - Bachelor's Degree in Industrial Design and Product Development Engineering
435 - Bachelor's Degree in Chemical Engineering
438 - Bachelor's Degree in Telecommunications Technology and Services Engineering
470 - Bachelor's Degree in Architecture Studies
476 -
430 - Bachelor's Degree in Electrical Engineering
581 - Bachelor's Degree in Telecommunications Technology and Services Engineering
439 - Bachelor's Degree in Informatics Engineering

ECTS: 4.0

Year: 4

Semester: 430 - First semester

434 - First semester

435 - First semester

436 - First semester

436 - First semester

436 - First semester

436 - First semester

436 - First semester

438 - First semester

438 - First semester

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439 - First semester

440 - First semester

470 - First semester

470 - First semester

476 - First semester

558 - First semester

581 - First semester

Subject Type: Optional

Module: ---

1.General information

1.1.Aims of the course

1.2.Context and importance of this course in the degree

1.3.Recommendations to take this course

2.Learning goals

2.1.Competences

2.2.Learning goals

2.3.Importance of learning goals

3.Assessment (1st and 2nd call)

3.1.Assessment tasks (description of tasks, marking system and assessment criteria)

4.Methodology, learning tasks, syllabus and resources

4.1.Methodological overview

The methodology followed in this course is oriented towards the achievement of the learning objectives. A wide range of teaching and learning tasks are implemented, such as lectures, practice sessions, visits, and autonomous work and study.

The proposed methodology seeks to promote retrospection in technological and scientific fields in order to understand the evolution of materials and energy available and its application to human progress.

4.2.Learning tasks

This course includes the following learning tasks:

- **Lectures.** In sessions with the whole group, the more theoretical aspects are addressed and supplemented by discussions on the social impact of technical changes.
- **Practice sessions.** The practice sessions provide a view of objects and installations for better understanding.
- **Visits.**

4.3.Syllabus

This course will address the following topics:

- Introduction: Prehistory. Mesopotamia and Egypt.
- Science and Technology in the Classical World: Greece and Rome.
- The medieval revolution: Tools and energy. The transmission of knowledge. Alchemy.
- Engineers and architects of the Renaissance. Mining and machinery.
- The proto-industrialization and scientific revolution.
- The steam era. The industrial Revolution.
- Energy, transportation, and steel. Applications of Chemistry and Construction.
- Technological Development and Communications.
- Industry and architecture in Aragon.

4.4.Course planning and calendar

Schedule sessions and deadlines of assignments

The lectures will be held in the classroom and schedule provided by EINA.
Type 4 (fieldwork in small groups)

- Visits to Museums Theatre Forum and Roman baths.
- Visits to churches: St. Paul, St. Philip, St. Charles, St. Engracia.
- Visits to Patio de la Infanta, Canal Imperial, university auditorium.
- Visits to museums and churches will be held on Saturdays.

The work done will be presented on paper or PDF via email before the deadline indicated by the teacher.

Further information concerning the timetable, classroom, office hours, assessment dates and other details regarding this course will be provided on the first day of class or please refer to the College of Higher Engineering and Architecture (EINA) website (<https://eina.unizar.es/>) and Moodle.

4.5.Bibliography and recommended resources

