290621 - TECNOI14 - Technology I

Coordinating unit: 290 - ETSAV - Vallès School of Architecture
Teaching unit: 753 - TA - Department of Architectural Technology
Academic year: 2019
Degree: DEGREE IN ARCHITECTURE STUDIES (Syllabus 2014). (Teaching unit Compulsory)
ECTS credits: 7
Teaching languages: Catalan, Spanish

Teaching staff

Coordinator: JOAN LLUIS ZAMORA MESTRE
Others:
  Primer quadrimestre:
  MARIANA PALUMBO FERNANDEZ - 1
  RAÚL SERRA FABREGÀ - 1
  JOAN LLUIS ZAMORA MESTRE - 1

Opening hours

Timetable: Tuesday from 10:30 to 11:50 (by appointment Athena)

Prior skills

Recognition of anatomical construction elements
Basic vocabulary building
Main technical functions of buildings

Requirements

Bases for the technical
Environmental design of the building
building systems

Degree competences to which the subject contributes

Specific:
ET2G. (ENG) Aptitud per aplicar les normes tècniques i constructives.
ET7G. (ENG) Capacitat per concebre, calcular, dissenyar, integrar en edificis i conjunts urbans i executar sistemes de divisió interior, fusteria, escales i altra obra acabada (T).
ET14G. (ENG) Coneixement adequat dels sistemes constructius convencionals i la seva patologia.
ET15G. (ENG) Coneixement adequat de les característiques físiques i químiques, els procediments de producció, la patologia i l'ús dels materials de construcció.
EP19G. (ENG) Coneixement adequat de l'ecologia, la sostenibilitat i els principis de conservació de recursos energètics i mediambientals.

Generical:
CE7. (ENG) Conocimiento de los métodos de investigación y preparación de proyectos de construcción.
CE8. (ENG) Comprensión de los problemas de la concepción estructural, de construcción y de ingeniería vinculados con los proyectos de edificios.
CE9. (ENG) Conocimiento adecuado de los problemas físicos y de las distintas tecnologías, así como de la función de
Analyze the technical requirements, formal and informal, that raises every project of construction and conditioning of an interior space. Understand the sensitive nature of the interior construction: it is the construction we feel and that makes the interior space livable. Use with solvency vocabulary of materials, products, elements of work proper to the interior construction. Know the regulations that condition the adequacy interventions in the interior of the buildings. Understand and organize the processes of execution of works proper to the interior construction. Integrate construction techniques and interior conditioning of buildings with the rest of subsystems. Understand and prevent the anomalous phenomena and aging of the building elements in the interior. Represent and specify the instructions and own orders of the project and interior work management. Adopt professional decisions with environmental, economic and social responsibility in their interventions to adapt the interior space.

**Teaching methodology**

Reflective.
The learning environment must encourage theoretical reflection. In this way, students can go becoming aware of how they learn and make improvements in their own learning process.

Likely.
The teacher must present students with real situations. This is to facilitate learning through the relationship of the student with a real and complex context.

Flexible.
The learning environment must allow students to learn when they can.

Open.
Students must be allowed that some of the content can learn for themselves; should offer them the opportunity to investigate and inquire, for it is best to allow access to different and varied sources of information.

Constructive.
We must help the new information is developed and built on the previous one, helping the students learn from their work and correcting their progress later.

On.
Internet allows students to take a more active role in the process of acquiring knowledge. It also promotes interaction, participation and generation of knowledge by the students themselves.

Collaborative.
The students not only acquire knowledge but also skills to interact, communicate and work together with other students.

**Learning objectives of the subject**

Analyze the technical requirements, formal and informal, that raises every project of construction and conditioning of an interior space. Understand the sensitive nature of the interior construction: it is the construction we feel and that makes the interior space livable. Use with solvency vocabulary of materials, products, elements of work proper to the interior construction. Know the regulations that condition the adequacy interventions in the interior of the buildings. Understand and organize the processes of execution of works proper to the interior construction. Integrate construction techniques and interior conditioning of buildings with the rest of subsystems. Understand and prevent the anomalous phenomena and aging of the building elements in the interior. Represent and specify the instructions and own orders of the project and interior work management. Adopt professional decisions with environmental, economic and social responsibility in their interventions to adapt the interior space.
### Study load

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<th>Total learning time: 175h</th>
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<td>Hours large group:</td>
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<td>Hours medium group:</td>
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<td>Guided activities:</td>
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<td>Self study:</td>
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Content

**Syllabus**

**Learning time:** 77h  
Theory classes: 38h 30m  
Practical classes: 38h 30m

**Description:**
To know the requirements, technical resources, constraints and impacts of construction and conditioning activities of interior architectural spaces, with regard to your application in the project and project management.

**Related activities:**
- Visits to buildings in operation
- Visits to showrooms and fairs
- Visits to works
- Conference professionals
- Expert Conference
- Business Conferences

**Specific objectives:**
- Environmental impact of the adequacy of internal sector.
- The construction and conditioning of the interior elements.
- The primary base closures: land, floors, platforms, firm.
- Vertical primary closures: partitions, screens, partitions.
- Primary coverage closures: roofs, ceilings.
- Fixing light systems.
- The integration of services and facilities in the interior space. Demands and problems. techniques. constructive solutions.
- Linings lower: pavements.
- Vertical linings: facings.
- The interior topcoats: ceilings.
- Internal openings.
- Artificial lighting systems.
- General concepts of higrotermia.
- Heating systems: systems for water and air systems.
- Cooling systems: systems for water and air systems.
- Ventilation systems.
- basics of acoustics and electro-acoustics.
- Materials and products for architectural interiors.
- The process of placing.
- Analysis of constructive goodness of applied technical solutions.
- Project documentation necessary for the execution and legalization of the work.
- acting trades and work organization.
- Quality control methodology, time and costs.
- Control of the environmental impact of internal work processes.
The objective of the evaluation proposal is to ensure the end of the academic year of the course achieving their learning goals.

It is also important that the extent of the possibilities available student is also informed of their rate of progress.

It is proposed to make a continuous assessment throughout the course in successive acts of evaluation. This acts have been designed so that its realization also have a reflection in the maturation of the student with professional future. For this reason they will develop both personal work environments as teamwork, both in field activities as cabinet, and so on propositional activities such as monitoring and management.

To pass the course is essential that the student is present and exceeds all assessment tests consisting of:

- **1 work CAMP**,(tracking form a construction and interior fittings selected by the students themselves), tutored and assisted to schedule consultations (quantitative participation of this assessment in the final assessment of the performance of the subject is 25% ). Monitoring selected by the student and approved by the teacher, work is done throughout the semester, according to the proposed format Athena. The result is delivered and assessed at the end of the first third of the development of the subject. Should responsible for the work request, a supporting document of academic writing of this monitoring will be delivered.

- **1 studio work** (competition format technical solutions), tutored and attended the consultation schedule (the quantitative participation of this assessment in the final assessment of performance is 25%). This work consists of the constructive development of a generic prototype interior room. It will be delivered at the end of the second third of the development of the subject.

- **1 test of theoretical and applied knowledge**, held in class within school hours (see schedule) on the last day of the course (the quantitative participation of this assessment in the final assessment of performance is 25%) and result is delivered and evaluated at the end of the course.

- **Practical exercises developed in class and delivered every week at ATENEA.** (the quantitative participation of this evaluation in the final evaluation of the performance is of 25%)

Assistance to the visits, conferences and other parallel academic events promoted by the subject is compulsory and will be carried out, whenever possible, within the timetable of the subject. (This attitude of participation of the student will increase the final evaluation of the performance by the end 10%).

The final grade of each student calibrate its regularity, its progression and the balanced acquisition of practical and theoretical knowledge.

### Qualification system

The exercises, visits, conferences, etc are programmed previously in the detailed program of the course each term deposits and update Athena.
# Bibliography

## Basic:


## Complementary:

- Gonzalez Moreno Navarro, José Luis. "Elementos verticales interiores". CAU. 1981, núms. 69 (p. 69-83), 70 (p. 75-88), 71(p. 67-82).


Pinturas y acabados industriales. Barcelona: José Mola Izquierdo,


Others resources:

Professional organizations:
http://www.codic.org [Official College of Decorators and Designers of Catalonia]
http://www.adp-barcelona.com [association of professional designers]
http://www.arq-infad.org [Association of Architects and Interior Designers]

Organizations and associations:
http://www.bcd.es [Barcelona Design Centre]
http://www.fadweb.com [promotion of decorative arts]
http://www.moblescat.com [Catalan Federation of Furniture Traders]
http://www.iida.org [international association of interior design]

decoration:
http://www.dekoracion.com [Decoration Portal, news, current affairs ...]
http://www.decoracioatres.com [integrated projects Interior]

Museums:
http://www.macm.org [Museum of Decorative Arts in Montreal, Canada]
http://www.moma.org [Museum of Modern Art (MOMA)]
http://www.design-museum.org.uk [Decorative Arts Museum of London]

schools:
http://www.baued.es [Bau, School of Design]
http://www.eina.edu [Eina School of Art and Design]
http://www.iccic.edu/elisava [Elisava School of Design]
http://www.escolamasana.es [Escola Massana]
http://www.deiadisseny.com [Deia, School of Design]
http://www.laiedu.org [Lai, School of Design]
http://www.artdisseny.com [Municipal School of Art in Terrassa]

others:
http://www.fotomobil.com [Search for photos]
http://www.rutadisseny.com [Bars, buildings, spaces, etc. Barcelona]
http://www.designboom.com [information, studies and interviews on the world of design]