

## IDENTIFICATION DETAILS

Degree:	Architecture		
Field of Knowledge:	Engineering and Architecture		
Faculty/School:	Higher Polytechnic School		
Course:	STRUCTURES II		
Type:	Compulsory	ECTS credits:	6
Year:	4	Code:	3741
Teaching period:	Seventh semester		
Area:	Structures		
Module:	Technical Drawing		
Teaching type:	Classroom-based		
Language:	Spanish		
Total number of student study hours:	150		

## SUBJECT DESCRIPTION

Se pretende que el alumno:

-Entienda que en las estructuras hiperestáticas el comportamiento de cada elemento influye y es influido sobre y por el resto de los elementos que componen la estructura.

-Interiorice una metodología de diseño estructural apartando las decisiones aleatorias.

-Entienda que los materiales estructurales influyen y condicionan el diseño de la estructura,

-Tenga en cuenta que tanto la evaluación de acciones como la seguridad estructural están regidos por una normativa de obligatorio cumplimiento.

-Sepa que los programas informáticos no resuelven estructuras por si mismos y que sus resultados deben ser analizados verificando que aporten resultados creibles.

-Asuma que las premisas adoptadas en el diseño y comprobación de una estructura deben trasladarse a la obra mediante el diseño de detalles coherentes con ellas.

-Establezca relaciones de magnitud entre las cargas aplicadas, las dimensiones estructurales, los valores de las solicitaciones y las secciones requeridas

## **SKILLS**

### **Basic Skills**

Students must have demonstrated knowledge and understanding in an area of study that is founded on general secondary education. Moreover, the area of study is typically at a level that includes certain aspects implying knowledge at the forefront of its field of study, albeit supported by advanced textbooks

Students must be able to apply their knowledge to their work or vocation in a professional manner and possess skills that can typically be demonstrated by coming up with and sustaining arguments and solving problems within their field of study

Students must have the ability to gather and interpret relevant data (usually within their field of study) in order to make judgments that include reflections on pertinent social, scientific or ethical issues

Students must be able to convey information, ideas, problems and solutions to both an expert and non-expert audience

Students must have developed the learning skills needed to undertake further study with a high degree of independence

### **General Skills**

Capacity for analytical, synthetic, reflective, critical, theoretical and practical thought.

Ability to resolve problems and to take decisions.

Ability to apply procedures.

An understanding of the problems involved in structural design, construction and engineering associated with building projects.

### **Specific skills**

Aptitude in conceiving, calculating, creating and integrating designs in buildings and urban sites and implementing building structures (T).

Adequate knowledge of solid, continuum and soil mechanics, and the plastic, elastic and resistance qualities of heavy construction materials.

### **DISTRIBUTION OF WORK TIME**

CLASSROOM-BASED ACTIVITY	INDEPENDENT STUDY/OUT-OF-CLASSROOM ACTIVITY
60 hours	90 hours