

## IDENTIFICATION DETAILS

Degree:	Architecture		
Field of Knowledge:	Engineering and Architecture		
Faculty/School:	Higher Polytechnic School		
Course:	STRUCTURES IV		
Type:	Compulsory	ECTS credits:	6
Year:	5	Code:	3750
Teaching period:	Ninth semester		
Area:	Structures		
Module:	Technical Drawing		
Teaching type:	Classroom-based		
Language:	Spanish		
Total number of student study hours:	150		

## SUBJECT DESCRIPTION

El alumno recordará el análisis necesario para la obtención de solicitaciones y predimensionado de secciones aplicándolo ahora al caso de estructuras metálicas sencillas y, posteriormente, comprobará la validez de secciones y piezas proyectadas y sus uniones

ante solicitaciones normales  
Esfuerzo axial con pandeo  
Momento flector

ante solicitudes tangenciales  
Esfuerzo cortante  
Momento torsor

y sus posibles combinaciones

a Flecha

y experimentará en la estimación de resultados con métodos rápidos de aproximación a los mismos.

## **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.

Knowledge of professional ethics, associative organisation, professional structure and civil liability.

## **DISTRIBUTION OF WORK TIME**

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