

Structure 2 Module

Chapter IV

Introduction of the use of structural software

Lecture

Tutorial (TD)

- Definition
- The most used structural software

- Examples for application

Chapter III

Analysis of the structural choices of major projects around the world

Lecture

Tutorial (TD)

- The City of Arts and Sciences, Valencia, Spain, by the architect S. Calatrava
- National Center for the Performing Arts, Beijing, China by the architect P. Andreu

- Shell Analysis

Chapter II

Mechanical behaviour of bracing

Lecture

Tutorial (TD)

- Definition of bracing
- Types of bracing
- Design of bracing

- Bracing Analysis

Chapter I

Long Span Structures

Lecture

Tutorial (TD)

- Definition of Long Span Structures
- History of Long Span Structures
- Classification of Long Span Structures
- Materials used for Long Span Structures

- Beam Analysis
- Truss Analysis
- Arch Analysis
- Cable Analysis

General Introncion to the Structures

Lecture

Tutorial (TD)

- Generalities about the structures

- Determinacy
- Stability

Evaluation:

- Continuous monitoring (TD)
- Exam

