

IDENTIFICATION

Course code : ESI-SPI-CI-BE4-
S7-UE1-EC5
ECTS : 2

DURATION

Lectures : 12
Tutorial classes : 12
Labs : 2
Total : 26

Project :
Personnal work :

ASSESSMENT

1 written exam and 1 mini-project

TEACHING MATERIALS

Course material

LANGUAGE

English

CONTACT

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UE : UE7-STRUC

COURSE : Steel structures

SCOPE OF THE COURSE

OBJECTIVES

To know and master all theoretical and practical concepts required to design metal structures according to Eurocode 3.

COMPETENCE AND SKILLS

STRUC Competence - Level 2 Design and verification of all metal elements in a typical structure such as a hangar, gymnasium, etc.

PROGRAM

• Materials • EC3 design basics • Resistance of cross-sections without instability • Buckling • Lateral-torsional buckling • Considering instability in bending • Flowcharts • Connections • Web buckling • Design of elements in a steel building

BIBLIOGRAPHY

Calcul et dimensionnement selon les Eurocodes 3 et 4 by Jacques Brozzetti and Pierre Bourrier
Calcul des structures métalliques selon l'Eurocode 3 by Jean Morel

REQUIREMENTS

Mathematics course. Course on mechanics of isostatic and hyperstatic structures. Load path and bracing course