

# Concrete structures 2 & masonry



ECTS  
7 credits



Component  
INSTITUT  
NATIONAL  
DES SCIENCES  
APPLIQUEES  
TOULOUSE



Number of  
hours  
105h

## Presentation

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### Description

Programme (detailed contents): Calculation and design of buildings in seismic area according to Eurocode 8, design of beams, walls with and without openings, foundations, design project.

Calculation of structures in case of fire according the eurocodes: combinations of actions, behaviour of warm materials, design of columns, beams and slabs, verification on reinforcements, technology.

Technology of masonry structures, French and European standards, design of masonry walls according to Eurocode 6.

Organisation:

Lectures, TD and project in earthquake engineering.

### Objectives

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At the end of this module, the student will have understood and be able to explain (main concepts):

The principles of design for building concrete structures under earthquake and under fire, the principles of design of masonry structures according to EC6.

The student will be able to:

Design and check simple concrete structures in case of fire, or built in seismic zone.

Write a calculation note and justify the structural elements.

Know the limite of EUROCODE 6 and justify a masonry wall. Calculation and design of buildings in seismic area according to Eurocode 8, design of beams, walls with and without openings, foundations, design project.

## Useful info

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### Contacts

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## Place

› Toulouse