



CONSTRUCTIONS

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Lecturers: **Eric VINCENS, Francesco FROILIO**

| Lecturers : 14.0 | TC : 0.0 | PW : 0.0 | Autonomy : 0.0 | Study : 16.0 | Project : 0.0 | Language : FR

Objectives

Through this course, three construction technologies most representative of current practices are approached, namely reinforced concrete, prestressed concrete and steel construction.

The aim of this course is to provide tools for making technological choices, and calculation techniques for dimensioning beams, floors, columns as well as load-bearing walls. The European regulatory framework which should guide the engineer in the design is also addressed. All the Practical Sessions associated with these courses are supervised by professional engineers.

Keywords : reinforced concrete, prestressed concrete, steel construction

Programme

Steel construction: 2 practical sessions (4h each)

Reinforced concrete: lectures (10h) + 2 practical sessions (4h each)

Prestressed concrete: lectures (4h)

Learning outcomes

Independent study

Objectifs : This activity is not concerned with framed autonomy activities outside personal work.

Méthodes : This activity is not concerned with framed autonomy activities outside personal work.

Core texts

Jean Perchat , *TRAITÉ DE BÉTON ARMÉ - SELON L'EUROCODE 2*, Le Moniteur, 2010

Henry Thonier *CONCEPTION ET CALCUL DES STRUCTURES DE BÂTIMENT : L'EUROCODE 2 PRATIQUE*, Presses de l'École nationale des ponts et chaussée, 2006

Jean-Pierre Muzeau, *APKMANUEL DE CONSTRUCTION MÉTALLIQUE*, Eyrolles Afnor éd., 2012

Assessment

1 grade from the final exam*0.75 + 1 grade from practical sessions*0.25