


 Faculty of Applied Sciences

**AMCO2032 DESIGN OF REINFORCED CONCRETE STRUCTURES**

[22.5h+22.5h exercises] 4 credits

This course is taught in the 1st semester

**Teacher(s):** Jean-François Cap  
**Language:** French  
**Level:** Second cycle

**Aims**

Study of linear cross section of reinforced concrete

**Main themes**

The course introduces to the design of concrete structural elements using limit states methods, and design guidelines based on the Eurocode design code.

**Content and teaching methods**

- Mechanical properties of concrete material and reinforcing steel.
- Structure analysis and safety concepts.
- Analysis and design of beams subjected to flexure, axial force, shear and torsion.
- Control of cracking and deformation;

**Other information (prerequisite, evaluation (assessment methods), course materials recommended readings, ...)**

Prerequisite : AUCE 1031

**Other credits in programs**

<b>ARCH22</b>	Deuxième année du programme conduisant au grade d'ingénieur civil architecte	(4 credits)	Mandatory
<b>ARCH23</b>	Troisième année du programme conduisant au grade d'ingénieur civil architecte	(4 credits)	
<b>FSA3DS/GC</b>	Diplôme d'études spécialisées en sciences appliquées (génie civil)	(4 credits)	
<b>GC22</b>	Deuxième année du programme conduisant au grade d'ingénieur civil des constructions	(4 credits)	Mandatory