


 Faculty of Applied Sciences

**AUCE1031 STRUCTURAL MATERIALS**

[15h+15h exercises] 2.5 credits

This course is taught in the 2nd semester

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

**Aims**

Knowledge of materials used in civil engineering structures

**Main themes**

This course introduces the main features of commonly used construction materials.

**Content and teaching methods**

- Structure and nature of materials
- Mechanical properties of materials (stress-strain relations, elastic behaviour, elastoplastic behaviour, ...)
- Nonmechanical properties of materials (density, thermal expansion, surface characteristics, ...)
- Laboratory tests on concrete, steel, and wood.
- Production considerations and economical factors.

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

Naught

**Other credits in programs**

<b>ARCH12BA</b>	Deuxième année de bachelier en sciences de l'ingénieur, orientation ingénieur civil architecte	(2.5 credits)
<b>FSA12BA</b>	Deuxième année de bachelier en sciences de l'ingénieur, orientation ingénieur civil	(2.5 credits)