

## Faculty of Applied Sciences



### AMCO2155 Hydraulics project

[60h] 4 credits

This course is taught in the 2nd semester

**Teacher(s):** Didier Bousmar, Yves Zech  
**Language:** French  
**Level:** Second cycle

#### Aims

- Introduce the issues of hydraulic structure design by the projecting approach
- In interaction with the course "hydraulic structures", learn to collect documentation and to design hydraulic structures

#### Main themes

- Design and calculation of an hydraulic structure
- Calculation note redaction and structure plan drawing
- Public presentation of the project

#### Content and teaching methods

The project theme is determined in function of the students' interests and of the available data; It is thus selected among the following topics:

- Large dams and auxiliaries
- River structures: navigation locks or river dams
- Urban hydraulic structures

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

- Complementary topic for theme "Hydraulics"
- Prerequisites: AMCO 2151 "General and statistical hydrology", AMCO 2152 "Hydraulics", AMCO 2153 "Fluvial hydraulics" and AMCO 2154 "Hydraulic structures"
- Teaching approach :
  - \* evaluation of data quality and of available documentation
  - \* eventually, data improvement by field measurement campaign
  - \* first approach by group discussion
  - \* learning of non- taught topics by problem-centred approach
  - \* opening to the socio-economic context
- Evaluation : written report, oral presentation

#### Other credits in programs

**GC22** Deuxième année du programme conduisant au grade (4 credits)  
 d'ingénieur civil des constructions