

# Hydraulique



Component  
École Nationale  
Supérieure  
d'Électrotechnique  
d'Électronique

## In brief

> **Ametys Code:** N6AM04A

## Presentation

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### Objectives

Basic concepts of steady-state or transient unidirectional flows

Introduction to usual softwares

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### Description

Pipe flows:

- General principles of hydraulics
- Definition of a pressure flow systems
- Flow regimes
- Notions of linear / singular head losses
- Pipeline networks
- Pumps and turbines

Open channel flow:

- Engineering problems of free surface flows
- Stationary flow
- Hydraulic structures and singularities

- Equations of Saint-Venant
- Numerical modeling

## Useful info