

Water, Environment and Risks

Introducing

Description

1- Environmental legislation and regulation
Basics of law and regulatory instruments (TD)
Design office project: Water in a region: from use to discharge

2- Environment
- Pollutant dispersion (mechanisms, consequences)
- Characterisation and typology of waste, waste management (treatment and storage methods), ordinary and radioactive waste, environmental impact of waste.

3- Process safety
Definitions of the main types of risk in the field of processes: calculation of the probability of human impact, toxicity, different types of explosion, thermal runaway. Protection methods and devices.

4- Water: issues for actors and industries
Environmental and health issues, indicators of pollution
Main treatment stages and processes

Objectives

- Explain the principles of environmental law in France and be familiar with legal and regulatory information tools.
- Describe the main environmental problems, the principles of water and waste management and the main treatment processes.

- Know the main risks in the process industry and the mechanisms of accidents.

Necessary prerequisites

Chemistry for solutions / Unit operations . Mass and Energy balances / kinetics and thermodynamics

Évaluation

L'évaluation des acquis d'apprentissage est réalisée en continu tout le long du semestre. En fonction des enseignements, elle peut prendre différentes formes : examen écrit, oral, compte-rendu, rapport écrit, évaluation par les pairs...

Practical info

Location(s)

 Toulouse