Unit operations 2

ECTS
5 crédits

Hourly volume
83h

Introducing

Objectives

At the end of this module, the student will have understood and be able to explain (main concepts):
- Phase equilibrium diagrams
- General concept for mass transfer unit operations (Ideal stages, operating lines¿). Kinetic limitations and theirs effects on separation
- Different ways to perform separation processes (single contact, cross-current and counter-current contactors)
- design tools for separators.

The student will be able to:
- use the equilibrium diagrams
- choose the required technology for a separation
- choose the contact mode
- write the mass balance
- design a multistage separation device (extraction, distillation, adsorption, absorption¿)
- then propose a contactor technology.

Necessary prerequisites

Hydraulics and dispersed systems (I3BETF21)
Fluid properties (I3BEPF12)
Heat and mass transfer (I3BETF32)
Thermodynamics

Basic concepts of Chemistry and Physics

Practical info

Location(s)

Toulouse