

UE Chemical thermodynamics and kinetics - CHI331 -

 ECTS
6 crédits

 Crédits ECTS
Echange
6.0

 Composante
Département
de la licence
sciences et
technologies
(DLST)

 Période de
l'année
Automne (sept.
à dec./janv.)

- › **Langue(s) d'enseignement:** Anglais
- › **Ouvert aux étudiants en échange:** Oui
- › **Crédits ECTS Echange:** 6.0

Présentation

Description

This course is divided into two parts: firstly, reaction rates, and secondly, the energy aspects and equilibrium shifts associated with a chemical reaction.

The aim is to understand the methods used to determine and measure reaction rates, to understand the factors that influence them, and to determine a partial or global order by linking model and experimental results.

In thermodynamics, the aim is to evaluate energy exchanges and reaction quantities, draw up a calorimetric balance, analyze the origin of irreversibility, and predict an equilibrium situation or direction of evolution for a chemical reaction.

Thermodynamic concepts will be applied to the study of the different states of a pure body and of binary systems.

Theoretical concepts will be put into practice via TD exercises, and on the occasion of three practical work sessions during which experimental data will be acquired and analyzed.

Heures d'enseignement

UE Chemical thermodynamics and kinetics - TD	TD	25,5h
UE Chemical thermodynamics and kinetics - TP	TP	12h
UE Chemical thermodynamics and kinetics - CM	CM	22,5h

Période : Semestre 3

Infos pratiques

Lieu(x) ville

- Grenoble

Campus

- Grenoble - Domaine universitaire