

# UE Introduction to drug discovery and drug design



Niveau d'étude  
Bac +4



ECTS  
3 crédits



Composante  
UFR Médecine

- > **Langue(s) d'enseignement:** Anglais
- > **Ouvert aux étudiants en échange:** Non

## Présentation

### Description

To lay the groundwork for the design of drugs and new biologically active substances by exploiting the knowledge related to the Chemistry-Biology interface. The program of this teaching unit will allow the student to discover the key –elements of research in the field of the design of new molecules of drug candidate.

The teaching unit (on line and face to face learning) is open to students from Master BioHealth Engineering (BHE), Master Sciences et Ingénierie du Médicament (SIM), Double Coursus Santé.

Exemples of topics:

- Introduction to Medicinal Chemistry and Drug Design
- Plants as source of drugs
- Physicochemical profile of the ligand
- Ligands and their chemical structure: Intermolecular interactions
- Direct drug design by molecular modeling
- Main principles of the metabolism of drugs
- Case studies : Platinum-derived anti-cancer drugs and PARP inhibitors
- Pharmaceutical development and biopharmaceutical aspects of drugs
- Initiation to molecular modeling

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## Heures d'enseignement

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|--|----|-----|
| UE Introduction to drug discovery and drug design - CM | CM | 18h |
| UE Introduction to drug discovery and drug design - TD | TD | 3h  |
| UE Introduction to drug discovery and drug design - TP | TP | 3h  |

**Période :** Semestre 8

## Infos pratiques

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### Lieu(x) ville

> Grenoble

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### Campus

> Grenoble - Domaine universitaire