ULLA online courses presents:

Artificial Intelligence in Drug Discovery

In this course you will explore how artificial intelligence (AI) is changing the drug discovery process which currently suffers from high attrition rates. You will be introduced to AI methods in general and will learn about several concrete applications of existing AI tools used in early drug discovery. Examples of topics you will learn about are ligand-based methods, proteochemometric modelling and structure-based virtual screening. More information can be found in the course information.

Course teachers

Prof. Dr. Gerard van Westen

Prof. Dr. Ola Spjuth

Dr. Albert Kooistra

October 13 - November 26 2025

Course duration: 6.5 weeks - 3 ECTs
Time investment: 13 hours/week

Did we spark your interest?
Apply for the course via your local
ULLA contact person
Application deadline: August 27 2025

TEACHING FORMAT

This 6.5-week online course will be taught in a flipped classroom approach. There will be a mix of self-study, hands-on sessions and at home assignments.

Self-study will prepare you for the hands-on sessions and will e.g., consist of videos, small assignments and articles.

During the hands-on sessions, your newly gained knowledge will be deepened and in small groups you will apply AI methods on different types of datasets.

Together with your group you will finish the course with presenting a case study during a plenary closing event.

General schedule	
Monday	Lecture + tutorial
Tuesday	Lecture + tutorial
Wednesday	Working on assignments
Thursday	Q&A session and finishing assignments
Friday	Preparation for next week

Note: this schedule might be different in certain weeks