

CH-640

**Modern Organic chemistry-Highlights in the field**

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<b>Cursus</b>	<b>Sem.</b>	<b>Type</b>
Chemistry and Chemical Engineering		Opt.

Language of teaching	English
Credits	1
Session	
Exam	Project report
Workload	30h
<b>Hours</b>	<b>28</b>
Lecture	14
Project	14
<b>Number of positions</b>	

**Frequency**

Every 3 years

**Remark**

From fall 2022 to spring 2023

**Summary**

Total synthesis, Natural product, Green chemistry, nantioselective synthesis, Organo-catalysis, Lewis acid, Transition-metal, Drug discovery.

**Content**

- Natural product, modern synthetic tools
- C-C bond formation, C-heteroatom bond formation
- Enantioselective synthesis
- Lewis acid-catalyzed transformation
- Transition metal-catalyzed transformation
- Organocatalysis
- Green chemistry
- Drug development, Drug discovery
- Interface of organic chemistry/biology, organic chemistry/bioorganic chemistry

**Keywords**

Total synthesis, Natural product, Green chemistry, Enantioselective synthesis, Organo-catalysis, Lewis acid, Transition-metal, Drug discover

**Learning Prerequisites****Important concepts to start the course**

M2 level

**Assessment methods**

Project report

**Resources**

### Websites

- [https://www.epfl.ch/schools/sb/research/isic/news-events/organic\\_chemistry\\_seminars/](https://www.epfl.ch/schools/sb/research/isic/news-events/organic_chemistry_seminars/)