

| Module title   |                   | Abbreviation                         |
|--|-------------------|--------------------------------------|
| Modern Synthetic Methods   |                   | o8-OCM-SYNT-161-mo1                  |
| Module coordinator   |                   | Module offered by                    |
| lecturer of the seminar  |                   | Institute of Organic Chemistry       |
| ECTS   | Method of grading | Only after succ. compl. of module(s) |
| 5  | numerical grade   | --                                   |
| Duration   | Module level      | Other prerequisites                  |
| 1 semester   | graduate          | --                                   |
| Contents   |                   |                                      |
| This module discusses modern stereoselective synthesis methods. It focuses on selected total syntheses, organometallic chemistry and catalysis.  |                   |                                      |
| Intended learning outcomes   |                   |                                      |
| Students are able to stereoselectively plan complex chemical syntheses and to stereochemically analyse them. They can explain total syntheses. They can describe aspects of organometallic chemistry and catalysis in synthesis chemistry.   |                   |                                      |
| Courses (type, number of weekly contact hours, language — if other than German)  |                   |                                      |
| S (2) + Ü (1)<br>Module taught in: German or English   |                   |                                      |
| Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)  |                   |                                      |
| a) written examination (approx. 90 to 180 minutes) or<br>b) oral examination of one candidate each (20 to 30 minutes) or<br>c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or<br>d) log (approx. 20 pages) or<br>e) presentation (approx. 30 minutes)<br>Language of assessment: German and/or English   |                   |                                      |
| Allocation of places   |                   |                                      |
| --   |                   |                                      |
| Additional information   |                   |                                      |
| --   |                   |                                      |
| Workload   |                   |                                      |
| 150 h  |                   |                                      |
| Teaching cycle   |                   |                                      |
| --   |                   |                                      |
| Referred to in LPO I (examination regulations for teaching-degree programmes)  |                   |                                      |
| --   |                   |                                      |
| Module appears in  |                   |                                      |
| Master's degree (1 major) Chemistry (2016)<br>Master's degree (1 major) Functional Materials (2016)<br>Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)<br>Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)<br>Master's degree (1 major) Chemistry (2018)<br>Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)<br>Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)<br>Master's degree (1 major) Functional Materials (2022)<br>Master's degree (1 major) Chemistry (2024) |                   |                                      |

Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)  
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2025)  
Master's degree (1 major) Functional Materials (2025)