

Module P 207: Catalyst Design

(Fak225680)

Learning objectives:

The students gain insight into the field of catalyst design.

Course units and temporal allocation:

Module P 207 'Catalyst Design' is comprised of the following course units:

	HPW	Semester
Lectures	2	SS
Laboratory Course	8	SS

This module will be offered by lecturers of organic and inorganic chemistry.

Course content:

The following topics are discussed during the **lectures**: basics and concepts of catalyst design: explorative coordination chemistry, mechanistic studies, and combinatorial catalysis research.

In the **laboratory course**, the students develop skills to run catalytic experiments and use them in teamwork with PhD students and postdocs to address open, catalysis-relevant, questions.

Entrance requirements:

None.

Assessment:

A written examination (an oral examination if fewer than seven students enroll in this course) covering the content of the lectures amounts to 50 %, and the quality of the lab course to 50%. The laboratory course assessment is based on the quality of the catalyst syntheses and the catalytic experiments.

Work load:

The lectures result in 60 hours of work, including lecture preparation, and the laboratory course work load is 180 hours. Thirty hours are needed to prepare for the examination. Total work load: 270 hours.

ECTS Credit Points: 9