Module Description
21-SC-16 Research Project B: Synthesis

Faculty of Chemistry

Version dated Jun 5, 2026

This module guide reflects the current state and is subject to change. Up-to-date information and the latest version of this document can be found online via the page

https://ekvv.uni-bielefeld.de/sinfo/publ/modul/694341581

The current and valid provisions in the module guide are binding and further specify the subject-related regulations (German "FsB") published in the Official Announcements of Bielefeld University.

Non-official translation of the module descriptions. Only the German version is legally binding.

21-SC-16 Research Project B: Synthesis

Faculty

Faculty of Chemistry

Person responsible for module

Prof. Dr. Thorsten Glaser

Prof. Dr. Harald Gröger

Prof. Dr. Stephan Hammer

Regular cycle (beginning)

Every winter semester

Credit points

10 Credit points

Competencies

The module is carried out as an independent research project in a faculty working group and builds on module 21-SC-12. After completing the module, students will be able to work independently on a manageable research question. They are able to carry out a literature search and draw up a research plan based on this. Students can independently design specific experiments on selected questions from the field of sustainable synthesis and use existing equipment in the research groups or modify it if necessary. Students are able to critically scrutinise their experimental results and draw relevant conclusions from the results. Students also expand their competences in time management and working in a research team.

Content of teaching

The module covers relevant experimental methods and evaluation procedures for research questions in the field of sustainable synthesis. The topics include current research questions from the working groups. The module 21-SC-16 must be conducted in a different working group or at least in a thematically different field than the module 21-SC-12.

Recommended previous knowledge

Advanced knowledge of physical, organic and inorganic chemistry

Necessary requirements

45 ECTS in chemical laboratory practice

Explanation regarding the elements of the module

Module structure: 1 SL, 1 uPr [1]

Courses

Title	Type	Regular cycle	Workload [5]	LP[2]
Research Project B: Synthesis	internship with seminar component / laboratory internship with seminar component	WiSe	300 h (240 + 60)	10 [SL] [Pr]

Study requirements

Allocated examiner	Workload	LP[2]
Teaching staff of the course **Research Project B: Synthesis (internship with seminar component / laboratory internship with seminar component)** *Seminar presentation of approx. 30 minutes*	see above	see above

Examinations

Allocated examiner	Type	Weighting	Workload	LP[2]
Teaching staff of the course **Research Project B: Synthesis (internship with seminar component / laboratory internship with seminar component)** *Portfolio consisting of research plan, execution of experiments and recording of observations and results, preparation of a written practical report of a maximum of 30 pages and presentation of the results.*	Portfolio	without grades	-	-

Legend

1	The module structure displays the required number of study requirements and examinations.
2	LP is the short form for credit points.
3	The figures in this column are the specialist semesters in which it is recommended to start the module. Depending on the individual study schedule, entirely different courses of study are possible and advisable.
4	Explanations on mandatory option: "Obligation" means: This module is mandatory for the course of the studies; "Optional obligation" means: This module belongs to a number of modules available for selection under certain circumstances. This is more precisely regulated by the "Subject-related regulations" (see navigation).
5	Workload (contact time + self-study)
SoSe	Summer semester
WiSe	Winter semester
SL	study requirement
Pr	Examination
bPr	Number of examinations with grades
uPr	Number of examinations without grades