Module name		Research internship in the field of master's thesis **Analytical chemistry**		
Abbreviation		MVMT		
Turnus annual	**Duration** 1 semester	**Semester of study** 3	**Credits** 10	**Assignment curriculum** M. Sc. Chemistry Subject: AnC Focus: M. M. (here subject: AC or OC) M. Sc. Chemical Biology Subject: SoC

Module structure

No.	Course	Type	CP	SWS	Presence-time	Own-study
1	Research internship	P	7	10	150 h	60 h
2	Seminar on the research internship	S	3	2	30 h	60 h
	Total		**10**	**12**	**180 h**	**120 h**

Person(s) responsible for the module	Dr. Sebastian Zühlke
Lecturer(s)	Dr. Sebastian Zühlke
Language	English
Requirements according to examination regulations	Participation requirement for the research internship in the major (Chemistry) or in the subject of the master thesis (Chemical Biology) is: The existence of the proof of expertise according to § 5 of the Chemicals Prohibition Ordinance (ChemVerbotsV) as well as the previous successful participation in 4 elective practicals and in at least 2 elective lectures, which must be part of the major field of study for chemistry students. In addition, students must have participated in the final examinations of at least 4 further compulsory elective lectures.
Recommended requirements	Participation "Analytical Chemistry - Water and Soil I" and "Introduction to Mass Spectrometry".
Study/examination achievements	Module examination: Experimental protocol and oral presentation Repeatability and rotation according to PO.
Learning objectives	Students acquire knowledge of modern sample preparation and separation methods as well as the functioning of analytical instruments. They independently carry out small

	research projects or research sub-projects using common methods of analytical chemistry. They deepen their ability to present their results appropriately in the form of a written paper and a lecture in accordance with the methods commonly used in analytical chemistry.
Learning outcomes and competencies	Upon successful completion of this module, students will be able to, - use the basic analytical separation methods and sample preparations. - operate the available equipment (especially mass spectrometers) and evaluate the data obtained. - to apply the acquired theoretical knowledge and subject-specific practical knowledge for the practical solution of analytical problems from the subfield of analysis of environmental pollutants and natural substances. - to place the obtained scientific results in the context of the already published findings in analytical chemistry as well as to summarize the obtained scientific results in the form of a written elaboration which meets the requirements of a scientific publication and to present them orally. - Conduct a computerized literature search and assess the validity and certainty of information. - discuss, appropriately communicate one's own point of view, and collaborate with others in developing solution strategies.
Content	The topic is based on current topics from the working group and should be in the subject of the master's thesis.
Media forms	Powerpoint presentations, blackboard, other working materials, evaluations at computer workstations
Literature	Oriented to the particular topic and issued individually.