

Suitable events

Focus module Chemistry A and B

Legend	
Rating system:	g = graded; ng= not graded (pass/fail) ne = no examination
Examination form:	W = written exam; O = oral exam; TP = term paper; P = presentation, MT = Master's thesis, IR = internship report
Duration:	Duration of the exam in min, var: variable
Weighting:	For courses = weighting of the examination grade for the module grade For modules = weighting of the module grade for the final grade entered.
SWS:	Semester hours per week
Status:	m = mandatory; op = optional
Type of teaching:	L=Lecture; S=Seminar; E=Exercise; Practical courses/internships=PC
CP:	Credit points (ECTS points)

as at: winter term 2025/2026

A focus module in the Department of Chemistry (Focus Module Chemistry A) must be compiled in such a way that a total of 9 ECTS credits are achieved. At least half of these must be examined and graded. The remaining ECTS credits can be earned by providing proof of regular attendance (german „Sitzschein“). The overall module grade is calculated from the arithmetic mean of the partial examination results weighted according to ECTS credits.

The module consists of courses offered by the Institutes of Inorganic Chemistry (ACM... courses), Organic Chemistry (OCM... courses), Physical and Theoretical Chemistry (PCM.../TCM... courses), and Analytical Chemistry (ANM... courses) of the Master's program in Chemistry with references to nanoscience and nanotechnology. It also includes courses offered by the Department of Chemistry specifically for the Master's program in Nanoscience.

A total of at least 4 SWS must be selected from one institute. Up to 2 SWS may be selected from courses offered by other institutes. The module coordinators decide on the eligibility of individual courses for the module.

If a second focus module in chemistry is taken (Focus Module Chemistry B), the focus module must be composed in such a way that a different institute than in Focus Module Chemistry A provides the majority of the courses. However, the rules for composition apply analogously.

If a laboratory internship is credited as a focus module (Focus Module Chemistry C), the Focus Module Chemistry A must also be completed (admission requirement).

Questions regarding the composition of the focus modules will be answered by Dr. Claudio Schrenk.

The following courses can be used to create a chemistry focus module in inorganic chemistry:

Titel	Dozent/in	Lernformen	SWS	LP
<i>ACM1: Fortgeschrittene Metallorganische Chemie 1 (WS)</i>	Wesemann	V	1	1,5
<i>ACM2: Fortgeschrittene Metallorganische Chemie 2 (WS)</i>	Kunz			
<i>ACM3: Metallorganische Chemie der Lanthanoide (SS)</i>	Anwander			
<i>ACM5: Fortgeschrittene spektroskopische Methoden (WS)</i>	Seitz			
<i>ACM6: Elementorganische Chemie 1 (SS)</i>	Schnepf			
<i>ACM7: Elementorganische Chemie 2 (SS)</i>	Schnepf			
<i>ACM14: Aktivierung kleiner Moleküle (SS)</i>	Wesemann			
<i>ACM15: Metall- organische Komplexkatalyse (SS)</i>	Kunz			
<i>ACM16: f-ElementKatalyse (WS)</i>	Anwander			
<i>ACM21: Bioanorganische Chemie 1 (SS)</i>	Sirsch			
<i>ACM22: Bioanorganische Chemie 2 (SS)</i>	Sirsch			
<i>ACM24: Grundlagen der Festkörper-NMR-Spektroskopie (WS)</i>	Eichele			
<i>ACM25: Fortgeschrittene Festkörper- NMR-Spektroskopie (WS)</i>	Eichele			
<i>ACM26: Elektronendichten und Röntgenbeugung in der Praxis (WS)</i>	Maichle-Mössmer Sirsch			
<i>ACM27: Aspekte der Nachhaltigen Chemie</i>	Manßen			

If not already attended as part of the bachelor's program, the following courses in inorganic chemistry may also be credited after consultation with the module coordinator

Titel	Dozent/in	Lernformen	SWS	LP
<i>ACM10: Nanochemie 1 (SS)</i>	Anwander	V	1	1,5
<i>ACM11: Nanochemie 2 (SS)</i>	Anwander			
<i>Grundlagen der Polymerchemie für Nano-Science (SS) (ONLY IN GERMAN!)</i>	Schrenk	V	2	3

The following courses can be used to create a chemistry focus module in organic chemistry:

Titel	Dozent/in	Lernformen	SWS	LP
<i>OCM1: Stereochemie und stereoselektive Synthese</i>		V	2	3
<i>OCM2: Physikalische Organische Chemie</i>		V	2	3
<i>OCM3: Synthesestrategien in der organischen Chemie</i>		V	2	3
<i>OCM4: Kohlenhydratchemie</i>		V	1	1,5
<i>OCM5: Reaktive Zwischenstufen</i>		V	2	3
<i>OCM7: Biokatalyse</i>		V	1	1,5
<i>OCM9: Naturstoffchemie</i>		V	2	3
<i>OCM10: Biopolymere</i>		V	1	1,5
<i>OCM11: Supramolekulare Chemie</i>		V	2	3
<i>OCM12: Organokatalyse</i>		V	2	3

If not already attended as part of the bachelor's program, the following courses in organic chemistry may also be credited after consultation with the module coordinator

Titel	Dozent/in	Lernformen	SWS	LP
<i>Grundlagen der Polymerchemie für Nano-Science (ONLY IN GERMAN!)</i>	Schrenk	V	2	3

The following courses can be used to create a chemistry focus module in physical and theoretical chemistry:

Titel	Dozent/in	Lernformen	SWS	LP
<i>PCM1 Übergreifende theoretische Konzepte der Spektroskopie (WS)</i>	Meixner	V	2	3
<i>PCM2 Anwendungen der phys. Chemie: feststoffe, Grenzflächen, Modellsysteme (SS)</i>	Scheele	V	2	3
<i>PCM3 Spektroskopie bei hohen Energien (SS 2. Hälfte)</i>	Casu	V	1	1,5
<i>PCM4 Molekulare Wechselwirkungen (WS 2. Hälfte)</i>		V	1	1,5
<i>PCM5 Heterogene Katalyse</i>		V	1	1,5
<i>PCM6 Grundlagen der elektrochemischen Verfahren (WS)</i>		V	1	1,5
<i>PCM7 Laserspektroskopie/Kurzzeitspektroskopie (SS)</i>	Braun, Meixner	V	2	3
<i>PCM8 Optische Mikroskopie, optische Einzelmolekülspektroskopie, Nanooptik (WS)</i>	D. Zhang, Meixner	V	2	3
<i>PCM9 Grundlagen der Sensorik (SS)</i>		V	2	3
<i>PCM10 Organische Halbleitermaterialien (SS 1. Hälfte)</i>	Peisert	V	1	1,5
<i>PCM11 Mikroskopie und Rastersondenmethoden (SS 2. Hälfte)</i>	Casu	V	1	1,5
<i>TCM1 Grundlagen der Quantenchemie (WS)</i>	Fink, Faßhauer	V	3	4,5
<i>TCM2 Verfahren der Quantenchemie (SS)</i>	Fink, Bettinger	V	2	3
<i>TCM4 Moleküldynamik (WS)</i>	Faßhauer	V	1	1,5

The following courses can be used to create a chemistry focus module in analytical chemistry:

Titel	Dozent/in	Lernformen	SWS	LP
<i>ANM1 Qualitäts- sicherung und Chemometrie mit Anwendungen (WS)</i>	Weimar	V	2	3
<i>ANM2 Trennmethoden, NMR und Kopplungsverfahren (SS)</i>		V	2	3
<i>ANM7 Sensoren (Blockkurs nach WS)</i>	Barsan	V	2	3
<i>ANM14 Moderne NMR-Methoden in der Organischen Chemie (WS)</i>	Kramer	V	2	3
<i>ANM15 Oberflächen- analytik (WS 1. Hälfte)</i>	Casu	V	1	1,5
<i>ANM16 Fortgeschrittene Elektrochemie (SS)</i>	May	V	2	3

Details about the events:

Tables of contents, topics covered, and further information about the events listed here can be found in the current Chemistry (M.Sc.) module handbook of the University of Tübingen.

Events beyond this scope can only be considered for a focus module if confirmation has been obtained in advance from the module coordinator.

Questions will be answered by the module coordinator: Dr. Claudio Schrenk
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