

---

**Modulbezeichnung:** Theoretical chemistry (CS-TC) 15 ECTS  
 (Theoretical chemistry)

Modulverantwortliche/r: Andreas Görling

Lehrende: Dozenten der Theoretischen Chemie, Andreas Görling

---

|                             |                        |                              |
|-----------------------------|------------------------|------------------------------|
| Startsemester: WS 2019/2020 | Dauer: 1 Semester      | Turnus: halbjährlich (WS+SS) |
| Präsenzzeit: 195 Std.       | Eigenstudium: 255 Std. | Sprache: Englisch            |

---

**Lehrveranstaltungen:**

Research project in Theoretical Chemistry, lasting 6 weeks (ca. 15 SWS/LAB) full time in a work group of the student's choice at a research group in Theoretical and Computer Chemistry as well as Computer Chemistry Centre at the Department of Chemistry and Pharmacy

- Attendance at lab Course is compulsory!

Specialisation module TC (WS 2019/2020, Praktikum, 15 SWS, Andreas Görling et al.)

---

**Es wird empfohlen, folgende Module zu absolvieren, bevor dieses Modul belegt wird:**

Quantum Chemistry

---

**Inhalt:**

- Practical introduction to current and state- of- the- art research topics in the field of quantum and computer chemistry
- Integration into a research group
- Guided work on a current research project using the methods of quantum and computer chemistry
- Attempts to solve independently a scientific problem

**Lernziele und Kompetenzen:**

Students

- apply and transfer knowledge acquired during their studies to handle and solve open questions in research projects in quantum and computer chemistry
  - put their own research results in relation to current literature and research papers in the field, and record their results in appropriate scientific writing and documentation style
  - present their own results and acquired knowledge in an appropriate scientific style in English language
- 

**Verwendbarkeit des Moduls / Einpassung in den Musterstudienplan:**

Das Modul ist im Kontext der folgenden Studienfächer/Vertiefungsrichtungen verwendbar:

[1] **Chemie (Master of Science): ab 3. Semester**

(Po-Vers. 2009 | NatFak | Chemie (Master of Science) | Vertiefungsmodul | Theoretische Chemie)

---

**Studien-/Prüfungsleistungen:**

Protokoll Theoretische Chemie (Prüfungsnummer: 67001)

(englische Bezeichnung: Notes: Theoretical Chemistry)

Prüfungsleistung, Protokollheft

Anteil an der Berechnung der Modulnote: 100%

weitere Erläuterungen:

Assessment and examinations: LAB (PL)

Calculation of the grade for the module: Final grade of the written report

Prüfungssprache: Englisch

Erstablesung: WS 2019/2020, 1. Wdh.: SS 2020

---