



CURRICULUM

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| Study Type | Master |
| Study Language | English |
| Faculty | Faculty of Chemical Engineering |
| Study programme | Chemistry and Technology |
| Study sub-programme | Applied Chemistry (focus on Physical or Analytical Chemistry) |
| Year | 2017/2018 |

Organization of the academic year 2017/2018

The academic year **2017/2018** starts on **11th September 2017** and ends on **7th September 2018**

Structure of the academic year

| Winter semester (WS) | |
|--|-----------------------|
| The dates of registration for the summer semester will be organized by the Dean´s office of the respective faculty no later than by 29th September 2017 . | |
| Lectures, seminars, laboratory work: | 18. 9. – 22. 12. 2017 |
| Assessment period: | 2. 1. – 16. 2. 2018 |

| Summer semester (SS) | |
|--|---|
| The dates of registration for the summer semester will be organized by the Dean´s office of the respective faculty no later than 2nd March 2018 | |
| Lectures, seminars, laboratory work: | 19. 2. – 25. 5. 2018 |
| Assessment period: | 28. 5. – 29. 6. 2018 27. 8. – 7. 9. 2018 |

The lessons start no earlier than at 8:00 a.m. The lessons always start on the hour, the duration of one lesson is 50 minutes.

The Rector´s Days: **20. 11. and 24. 11. 2017**

The Students´ Scientific Conference: 20. 11. 2017
Open Days: 24. 11. and 25. 11. 2017
19. 1. and 20. 1. 2018

Enrolment in compulsory-optional and optional courses and registration for timetable

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|--|--|
| Enrolment in compulsory-optional and optional courses for WS (I. year of study) | At the Dean ´s office during Enrollment day or 8. 9. – 15. 9. 2017 |
| Registration for the timetable for WS: | 8. 9. – 15. 9. 2017 |
| Preliminary enrolment in compulsory-optional and optional courses SS: | 23. 11. – 1. 12. 2017 |
| Registration for the timetable of the SS: | 9. 2. -16. 2. 2018 |
| Preliminary enrolment in compulsory-optional and optional courses WS 2018/19: | 10. 5. – 18. 5. 2018 |

Important dates for students of II. year of Master studies

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|--|--------------------|
| Check of study requirements fulfillment: | by 11. 5. 2018 |
| Submission of Master Diploma Thesis | by 11. 5. 2018 |
| Dates of State Final Examination *: | 1. 6. – 8. 6. 2018 |

* The exact dates are to be decided by the Dean of the respective faculty.

The graduation ceremony for Master degree graduates will be held on **19th June and 21st June 2018.**

Abbreviations and their meaning:

| Abbrev. ENG | Abbrev. CZE | |
|------------------------|------------------------|-------------------|
| C | Z | credit |
| MC | KZ | classified credit |
| Ex | Zk | examination |

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|---|-----------------|
| p | lecture |
| c | seminar |
| l | laboratory work |

the numbers preceding an abbreviation indicate number of lessons per week

Study Programme: **Chemistry and Technology**
 Study Sub-programme: **Applied Chemistry (focus on Physical or Analytical Chemistry)**
 Code: **APCHEM**

1st year - WINTER SEMESTER

| Code | Subject | Department | Study Hours | Exam | Cred |
|---|--|------------|-------------|------|------|
| S110012 | Organic Synthesis | 110 | 3p+2c | Ex | 7 |
| S150001 | Laboratory project I | 150 | 10l | Ex | 7 |
| S402037 | Molecular Modelling | 402 | 1p+2c | Ex | 4 |
| Elective subject 1 (choose at least 1 subject(s) from this group) | | | | | |
| S101011 | Coordination Chemistry | 101 | 3p+1c | Ex | 6 |
| S403006 | Chemical Kinetics | 403 | 2p+1c | Ex | 4 |
| S403008 | Electrochemistry | 403 | 2p+1c | Ex | 4 |
| Elective subjects 2, 3, 4 (choose at least 3 subject(s) from this group) | | | | | |
| S105011 | Engineering Thermodynamics | 105 | 3p+2c | Ex | 7 |
| S110015 | Organic Reaction Mechanisms | 110 | 2p+2c | Ex | 5 |
| S111020 | Technical Catalysis | 111 | 2p+2c | Ex | 5 |
| S402005 | Atomic Spectroscopy | 402 | 2p+2c | Ex | 5 |
| S402020 | Theoretical Fundamentals of Analytical Chemistry | 402 | 2p+1c | Ex | 4 |
| S402038 | Introduction to Molecular Physical Chemistry | 402 | 2p+1c | Ex | 4 |
| S402042 | Chemometrics in Analytical Chemistry | 402 | 2p+1c | Ex | 4 |
| S403018 | State Behaviour and Thermodynamic Properties of Fluids | 403 | 3p+2c | Ex | 7 |
| S403021 | Quantum Chemistry | 403 | 2p+2c | Ex | 5 |

1st year - SUMMER SEMESTER

| Code | Subject | Department | Study Hours | Exam | Cred |
|--|---------------------------------------|------------|-------------|------|------|
| S110013 | Retrosynthesis | 110 | 3p+1c | Ex | 6 |
| S150002 | Laboratory project II | 150 | 10l | MC | 7 |
| S403024 | Structure and Properties of Molecules | 403 | 3p+1c | Ex | 6 |
| Elective subject 5 (choose at least 1 subject(s) from this group) | | | | | |
| S402015 | Molecular Spectroscopy | 402 | 2p+1c | Ex | 4 |
| S403020 | Phase Equilibria | 403 | 3p+2c | Ex | 7 |
| Elective subjects 6, 7 (choose at least 2 subject(s) from this group) | | | | | |
| S101009 | Crystal Chemistry | 101 | 2p+1c | Ex | 3 |
| S112003 | Macromolecular Chemistry | 112 | 2p+1c | C+Ex | 4 |
| S402016 | Bioanalytical Methods | 402 | 2p | Ex | 3 |
| S403023 | Statistical Thermodynamics | 403 | 3p+1c | Ex | 6 |

2nd year - WINTER SEMESTER

| Code | Subject | Department | Study Hours | Exam | Cred |
|--|--|------------|-------------|------|------|
| S105008 | Applied Reaction Kinetics | 105 | 2p+2c | C+Ex | 4 |
| S150003 | Laboratory project III | 150 | 10l | MC | 7 |
| S403038 | Processing of Physico-Chemical Data | 403 | 2p+1c | Ex | 4 |
| Elective subjects 8, 9, 10 (choose at least 3 subject(s) from this group) | | | | | |
| S110014 | Transition Metals in Organic Synthesis | 110 | 3p+1c | Ex | 6 |
| S112008 | Physical Chemistry of Polymers | 112 | 2p+2c | Ex | 5 |
| S402012 | Electroanalytical Methods | 402 | 2p+2c | Ex | 4 |
| S402014 | Methods of Structural and Surface Analysis | 402 | 2p | Ex | 3 |
| S403025 | Chemical Equilibria | 403 | 3p+2c | Ex | 7 |
| S403028 | Physical Chemistry of Phase Boundaries | 403 | 2p+1c | Ex | 4 |

2nd year - SUMMER SEMESTER

| Code | Subject | Department | Study Hours | Exam | Cred |
|---------|-------------------------|------------|-------------|------|------|
| S963008 | Diploma Thesis | 963 | 30c | C | 30 |
| S963010 | Diploma Thesis | 963 | | D | 0 |
| S963019 | Final state examination | 963 | | 1 | 0 |