Introduction to the Master’s Program Physics
October 2016

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How do I get a Master’s Degree?

Five requirements:

1. Successful passing of all compulsory modules of one focus of studies
   - Compulsory modules are listed in the curriculum
   - See next slide

2. At minimum 60 Credits from modules assigned to the first year of studies
   Freely selectable from
   - Specialisation courses of the chosen focus of studies
   - Compulsory or specialisation courses of the other focuses of study
   - Subsidiary Modules

3. Passing of Master’s Seminar und Master’s Practical
   - Introduction into Master’s thesis at one of the institutes
   - Master’s Seminar: Acquire in-depth scientific knowledge in the chosen thesis subject
   - Master’s Practical: Get acquainted with the scientific methods of the chosen field

4. Master’s Thesis

5. Master’s Defence Colloquium
# Curriculum of the Master’s Program

<table>
<thead>
<tr>
<th>Semester</th>
<th>Class Hours</th>
<th>Credits</th>
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<tbody>
<tr>
<td>1st semester</td>
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<td>30</td>
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<tr>
<td>2nd semester</td>
<td>30</td>
<td>30</td>
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<tr>
<td>3rd semester</td>
<td>30</td>
<td>30</td>
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<tr>
<td>4th semester</td>
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<table>
<thead>
<tr>
<th>Course</th>
<th>Particle Physics</th>
<th>Astroparticle Physics</th>
<th>Quantum Field Theory and Gauge Theories</th>
<th>Experimental Condensed Matter Physics</th>
<th>Nanoelectronics</th>
<th>Condensed Matter Theory</th>
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</thead>
<tbody>
<tr>
<td>Particle Physics I</td>
<td>V4 U2</td>
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<td>Quantum Field Theory of Particle Physics I</td>
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<tr>
<td>Theory of Relativity and Cosmology</td>
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</table>

*Elective Courses (chosen from courses above or from specialization and subsidiary courses)*

Total: 120
Currently offered courses within CAMPUS

### Focus of Study Courses

- **Physik (M.Sc.)**
  - Examinations for students with conditional admission
  - Informative Events
  - Focus of Study
    - All Courses
    - Experimental Particle Physics
    - Astroparticle Physics and Cosmology
    - Quantum Field Theory and Gauge Theories
    - Experimental Condensed Matter Physics
    - Nanoelectronics
    - Condensed Matter Theory
  - Subsidiary Subjects
  - Voluntary Courses
    - Master’s Seminar
    - Master’s Practical
    - Master’s Defence Colloquium

### Subsidiary Subjects

- Astronomy and Astrophysics
- Betriebswirtschaft (Economics)
- Biomedizinische Technik (Biomedical Engineering)
- Biophysik (Biophysics)
- Chemie (Chemistry)
- Energietechnik (Energy Technology)
- Geophysik (Geophysics)
- Informatik (Computer Science)
- Kristallographie (Crystallography)
- Lasertechnik (Laser Technology)
- Luft- und Raumfahrttechnik (Aerospace Technology)
- Mathematik (Mathematics)
- Patentwesen (Patent System)
- Philosophie (Philosophy)
- Technische Akustik (Technical Acoustics)
- Verfahrenstechnik (Process Technology)
- Werkstoffe der Elektrotechnik (Electronic Materials)
- Werkstoffphysik (Physics of Materials)
Which Courses should I choose?

Masterprüfungsordnung (Examination Regulation of the Master’s program) offers a lot of flexibility.

How do I use this flexibility reasonably?

1. Decide for a focus of study
2. Attend the compulsory courses of the chosen focus of study
3. Choose from the offered specialisation courses
4. Complement by subsidiary subjects

What should you avoid?

- Don’t dissipate on very diverse courses, but set your focus according to your interests!
- Choose your subsidiary courses only from one (at most two) subsidiary subjects!

You can decide in large part on the curriculum of your Master’s program

Due to your choice of courses you are self-responsible for a reasonably and meaningful Master’s Certificate!