Master in Biology, Major Topic Molecular Bioscience:

Obligatory Courses WS:
- Molecular Bioscience 5 CP
- Neurobiology 3 CP
- Biodiversity / Ecology 3 CP

11 CP

Choice of a biological/medical subject, with a total of 15 CP, or a further biological subject with at least 15 CP; WS + SS:
- Pharmacology + Toxicology; Virology; Medical Neuroscience; Human genetics, Biochemistry; Biophysics (WS + SS)
- Biological subjects: See modules of the minor topics Biodiversity and Ecology or Neurobiology

15 CP

Choice of a non-biological subject with a total of 12 CP, WS + SS:
- Computer science; Mathematics; Chemistry; Economics; Philosophy; Psychology; Thinking about Science (WS + SS)

12 CP

Choice, two out of three:
- Patent right 3 CP (WS)
- Quality control 3 CP (SS)
- Medical products 3 CP (WS)

6 CP

Without Minor Topic:
Choice, two out of five courses:
- Molecular Botany 18 CP (WS)
- Microbiology 18 CP (WS + SS)
- Genetics 18 CP (SS)
- Protein-Biochemistry 18 CP (SS)
- Conservation Genomics + Molecular Biology 18 CP (WS)
- Endocrinology 18 CP (WS)

With Minor Topic Neurobiology:
Choice, one out of five courses:
- Molecular Botany 18 CP (WS)
- Microbiology 18 CP (WS + SS)
- Genetics 18 CP (SS)
- Protein-Biochemistry 18 CP (SS)
- Conservation Genomics + Molecular Biology 18 CP (WS)
- Endocrinology 18 CP (WS)

With Minor Topic Biodiversity and Ecology:
Choice, one out of five courses:
- Molecular Botany 18 CP (WS)
- Microbiology 18 CP (WS + SS)
- Genetics 18 CP (SS)
- Protein-Biochemistry 18 CP (SS)
- Conservation Genomics + Molecular Biology 18 CP (WS)
- Endocrinology 18 CP (WS)

18 - 36 CP

Choice, one out of two courses:
- Neurobiology 21 CP (WS)
- Behavioral Physiology 21 CP (SS)

Choice, courses with a total of at least 18 CP out of five courses:
- Evolutionary Ecology: Interactions of Organisms and their Environment 12 CP (SS)
- Field Ecol. I: Ecol. of the Mediterranean 9 CP (SS)
- Field Ecol. II: Tropical Ecology 18 CP (Sept.)
- Field Ecol. III: Marine Ecology 9 CP (SS)
- Tropical Ecology 12 CP (WS)
- Conservation Genomics 12 CP (WS)
- Chemical Ecology 12 CP (WS)
- Wetland Ecology 9 CP (SS)
- Soil & Water Ecology 9 CP (SS)

0 - 21 CP

Advanced Methods in Bioscience 10 CP

Master Thesis 30 CP (Semester 3 or 4)

40 CP

120 - 123 CP
### Master in Biology, Major Topic **Biodiversity and Ecology**:

**Obligatory Courses WS:**

<table>
<thead>
<tr>
<th>Molecular Bioscience 5 CP</th>
<th>Neurobiology 3 CP</th>
<th>Biodiversity / Ecology 3 CP</th>
</tr>
</thead>
</table>

**Choice of a biological/medical subject, with a total of 15 CP, or a further biological subject with at least 15 CP; WS + SS:**

- Pharmacology + Toxicology; Virology; Medical Neuroscience; Human genetics, Biochemistry; Biophysics (WS + SS)
- Biological subjects: See modules of the minor topics Neurobiology or Molecular Bioscience

**Choice of a non-biological subject with a total of 12 CP, WS + SS:**

- Computer science; Mathematics; Chemistry; Economics; Philosophy; Psychology; Thinking about Science (WS + SS)

**Statistics 3 CP (WS)**

**Excursion 3 CP (SS)**

**Without Minor Topic:**

**Choice, courses with a total of at least 36 CP out of five courses:**

- Evolutionary Ecology: Interactions of Organisms and their Environment 12 CP (SS)
- Field Ecol. I: Ecol. of the Mediterranean 9 CP (SS)
- Field Ecol. II: Tropical Ecology 18 CP (Sept.)
- Field Ecol. III: Marine Ecology 9 CP (SS)
- Tropical Ecology 12 CP (WS)
- Conservation Genomics 12 CP (WS)
- Chemical Ecology 12 CP (WS)
- Wetland Ecology 9 CP (SS)
- Soil & Water 9 CP (SS)

**With Minor Topic Neurobiology:**

**Choice, courses with a total of at least 18 CP out of five courses:**

- Evolutionary Ecology: Interactions of Organisms and their Environment 12 CP (SS)
- Field Ecol. I: Ecol. of the Mediterranean 9 CP (SS)
- Field Ecol. II: Tropical Ecology 18 CP (Sept.)
- Field Ecol. III: Marine Ecology 9 CP (SS)
- Tropical Ecology 12 CP (WS)
- Conservation Genomics 12 CP (WS)
- Chemical Ecology 12 CP (WS)
- Wetland Ecology 9 CP (SS)
- Soil & Water 9 CP (SS)
- Neurobiology 21 CP (WS)
- Behavioral Physiology 21 CP (SS)

**With Minor Topic Molecular Bioscience:**

**Choice, courses with a total of at least 18 CP out of five courses:**

- Evolutionary Ecology: Interactions of Organisms and their Environment 12 CP (SS)
- Field Ecol. I: Ecol. of the Mediterranean 9 CP (SS)
- Field Ecol. II: Tropical Ecology 18 CP (Sept.)
- Field Ecol. III: Marine Ecology 9 CP (SS)
- Tropical Ecology 12 CP (WS)
- Conservation Genomics 12 CP (WS)
- Chemical Ecology 12 CP (WS)
- Wetland Ecology 9 CP (SS)
- Soil & Water 9 CP (SS)

**Choice, one out of two courses:**

- Molecular Botany 18 CP (WS)
- Microbiology 18 CP (WS + SS)
- Genetics 18 CP (SS)
- Protein-Biochemistry 18 CP (SS)
- Conservation Genomics + Molecular Biology 18 CP (WS)
- Endocrinology 18 CP (WS)

**Advanced Methods in Bioscience 10 CP**

**Master Thesis 30 CP (Semester 3 or 4)**

**11 CP**

**15 CP**

**12 CP**

**6 CP**

**18 - 36 CP**

**0 - 21 CP**

**40 CP**

**120 - 123 CP**
Master in Biology, Major Topic **Neurobiology**:

**Obligatory Courses WS:**
- Molecular Bioscience 5 CP
- Neurobiology 3 CP
- Biodiversity / Ecology 3 CP

**Choice** of a biological/medical subject, with a total of 15 CP, or a further biological subject with at least 15 CP; WS + SS:
- Pharmacology + Toxicology; Virology; Medical Neuroscience; Human Genetics; Biochemistry; Biophysics (WS + SS)
- Biological subjects: See modules of the minor topics Biodiversity and Ecology or Molecular Bioscience

**Choice** of a non-biological subject with a total of 12 CP, WS + SS:
- Computer science; Mathematics; Chemistry; Economics; Philosophy; Psychology, Thinking about science (WS + SS)

**Without Minor Topic:**
- Two courses:
  - Neurobiology 21 CP (WS)
  - Behavioral Physiology 21 CP (SS)

**With Minor Topic Molecular Bioscience:**
- Choice, one out of two courses:
  - Neurobiology 21 CP (WS)
  - Behavioral Physiology 21 CP (SS)

- Choice, one out of five courses:
  - Molecular Botany 18 CP (WS)
  - Microbiology 18 CP (WS + SS)
  - Genetics 18 CP (SS)
  - Protein-Biochemistry 18 CP (SS)
  - Conservation Genomics + Molecular Biology 18 CP (WS)
  - Endocrinology 18 CP (WS)

**With Minor Topic Biodiversity and Ecology:**
- Choice, one out of two courses:
  - Neurobiology 21 CP (WS)
  - Behavioral Physiology 21 CP (SS)

- Choice, courses with a total of at least 18 CP out of five courses:
  - Evolutionary Ecology: Interactions of Organisms and their Environment 12 CP (SS)
  - Field Ecol. I: Ecol. of the Mediterranean 9 CP (SS)
  - Field Ecol. II: Tropical Ecology 18 CP (Sept.)
  - Field Ecol. III: Marine Ecology 9 CP (SS)
  - Tropical Ecology 12 CP (WS)
  - Conservation Genomics 12 CP (WS)
  - Chemical Ecology 12 CP (WS)
  - Wetland Ecology 9 CP (SS)
  - Soil & Water 9 CP (SS)

**Choice, one out of five courses:**
- Excursion 3 CP (SS)
- Statistics 3 CP (WS)
- Patent right 3 CP (WS)
- Medical products 3 CP (WS)
- Quality control 3 CP (SS)

**Advanced Methods in Bioscience 10 CP**

**Master Thesis 30 CP (Semester 3 or 4)**

**Total:**
- 120 CP
Master in Biology, dates of the courses:

**Obligatory Courses WS:**

<table>
<thead>
<tr>
<th>Subject</th>
<th>Lectures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Molecular Bioscience</td>
<td>Lectures from the beginning of the winter term until Christmas; recommended for the first semester</td>
</tr>
<tr>
<td>Neurobiology</td>
<td></td>
</tr>
<tr>
<td>Biodiversity / Ecology</td>
<td></td>
</tr>
</tbody>
</table>

**Medical subjects:**

- Pharmacology + Toxicology (German): 2 lectures in the winter term, lab work: end of March / beginning of April, seminar: winter or summer term
- Virology (English): 1 lecture + seminar in the winter term, 1 lecture + seminar in the summer term, lab work: individual planning
- Human genetics (German): 1 lecture + seminar in the winter term, 1 lecture + seminar in the summer term, lab work: end of March / beginning of April
- Medical Neuroscience (English): lecture as a 2-day block in December, lab work + seminar: individual planning
- Other subjects: individual planning

**Non-biological subject:**

- Thinking about Science: for students without German knowledge; seminar “Thinking about science” + German course + 6 credits free choice, offered both in the winter and summer term
- Computer science (German): lecture “Allgemeine Informatik I” + exercises in the winter term, lecture “Allgemeine Informatik II” + exercises in the summer term
- Economics (German): lecture “BWL” + lecture “VWL”; both in the winter term
- others: Individual planning
## Master in Biology, dates of the courses:

### Modules in the major subjects:

### Molecular Bioscience:
- Molecular Botany: 6-week block with lab work and seminar after the winter term
- Microbiology: 1 lecture + seminar in the winter term after Christmas (host-microbe-interactions), 1 lecture in the summer term, lab work: 6-week block in the first half of the summer term
- Genetics: 1 lecture + seminar in the summer term, 1 seminar in winter or summer term, lab work: 6-week block in the second half of the summer term
- Protein-Biochemistry: 1 lecture + seminar in the summer term, lab work: 6-week block after the summer term
- Conservation Genomics + Molecular Biology: 3-week block with lecture, seminar and lab work in the first half of the winter term (recommended for the third term) + 6 credits out of lectures and / or seminars from the other modules in Molecular Bioscience, which are not already selected (no double assignment is allowed)
- Endocrinology: 6-week block with lecture, seminar and lab work after Christmas; recommended for the third semester

### Biodiversity and Ecology:
- Chemical Ecology: 3-week block with lecture, seminar and lab work after Christmas
- Wetland Ecology: 3-week block with lecture and lab work in the beginning of the summer term
- Evolutionary Ecology: Interactions of Organisms: 3-week block with lecture, seminar and lab work in the second half of the summer term
- Conservation Genomics: 3-week block with lecture, seminar and lab work in the first half of the winter term (recommended for the third term)
- Tropical Ecology: 3-week block with lecture, seminar and lab work in the first half of the winter term (recommended for the third term)
- Field Ecology I: Ecology of the Mediterranean: 4-week block with lecture, excursion and practical work in the first half of the summer term; in odd years only
- Field Ecology II: Tropical Ecology: 4-week block with lecture, seminar, excursion and practical work in Costa Rica in September; in even years only
- Field Ecology III: Marine Ecology: 4-week block with lecture, excursion and practical work in the first half of the summer term; in even years only
- Soil & Water: common teaching module with universities in France, Estonia and the Czech Republic; 2-week block with lecture, seminar, excursion and practical work in one of the four countries in September

### Neurobiology:
- Advanced Neurobiology: 6-week block after Christmas with lecture, seminar and lab work
- Behavioral Physiology: 6-week block in the second half of the summer term.