MSc Information Session

(A) What is expected during the next 2 semesters and
(B) possible focus areas

Lecturer: Bockmayr, Reinert, Günzel, Banerjee, Piro
Orga: Seyferth, Conrad
MSc Bioinformatics – second & third semester

<table>
<thead>
<tr>
<th>Semester</th>
<th>1 (30 credits)</th>
<th>2 (30 credits)</th>
<th>3 (30 credits)</th>
<th>4 (30 credits)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Algorithms (6 credits)</td>
<td>Genomics (6 credits)</td>
<td>Numerics (6 credits)</td>
<td>Optimization (6 credits)</td>
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<td></td>
<td>Core Module 1 (10 credits)</td>
<td>Core Module 2 (10 credits)</td>
<td>Practical Module 1 (5 credits)</td>
<td>Practical Module 2 (5 credits)</td>
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<tr>
<td></td>
<td>Research Internship (10 credits)</td>
<td>Research Module A/B (20 credits)</td>
<td>Master’s Thesis with Oral Presentation (30 credits)</td>
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</tbody>
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- 2 Core Modules (10 + 10 credits)
- 2 Practical Modules (5 + 5 credits)
- Research Internship (10 credits)
- Research Module (20 credits)
MSc Bioinformatics
2nd & 3rd semester

Core Modules (6 SWS*, 10 cr) – you need two of these

- Biodiversity and Evolution
- Network Analysis
- Physiology
- Sequence Analysis
- Structural Bioinformatics

Please note: Core modules are offered only in summer semester!

*SWS = hours a week
MSc Bioinformatics
2nd & 3rd semester

Practical Modules (4 SWS, 5 cr) – you need two of these

- Applied Sequence Analysis SoSe 19
- Current Issues in Medical Genomics SoSe 19
- Applied Machine Learning SoSe 19
- Current Issues in Cell Physiology SoSe 19 + WiSe 19/20
- Computer-Aided Drug Design WiSe 19/20
- Environmental Metagenomics WiSe 19/20
- Current Issues in Structural Bioinformatics WiSe 19/20
Research Modules: you need one of these

- **Research Module A** (two lectures with exercises, one seminar, project paper, 20 credits)
- **Research Module B** (one lecture with exercise, two seminars, project paper, 20 credits)

Research modules consist of **research-oriented courses**, which students can choose from the course catalogue of the current semester. **All courses offered match both, research module A and research module B.**
Overview Courses (Research Module) SoSe 19

Seminars (5 cr):
- Compact Data Structures
- Computer-aides Drug Design – Methods and Application
- Introduction to Computational Proteomics
- Computational Meta-Omics
- Methods for Genome Analysis
- Reaction Diffusion Simulation

Lecturs with exercises (5 cr):
- Advanced Biometrical Methods
- Statistical Methods for Small Sample Sizes

- Methods for Investigating the RNA structurome and RNA-RNA interactome
  (V+Ü+S, 10 cr) – Registration closed

January 31, 2019
Further information


Course catalog: https://www.fu-berlin.de/vv/en/