Foundation in Geometry and Topology F4D1:
- Topology I (winter term)
- Topology II (summer term)
- Foundations in Analysis and Geometry on Manifolds (not every year)
- Geometry (not every year)

Lectures of Foundation modules may be taught in German.

Core Lecture Courses (taught in English):
- V4D1 Algebraic Topology I
- V4D2 Algebraic Topology II
- V4D3 Advanced Geometry I
- V4D4 Advanced Geometry II

Advanced Lecture Courses (taught in English):
- V5D1 Advanced Topics in Topology
- V5D2 Selected Topics in Topology
- V5D3 Advanced Topics in Geometry
- V5D4 Selected Topics in Geometry
- V5D5 Advanced Topics in Differential Geometry
- V5D6 Selected Topics in Differential Geometry

You will find the list of modules that are actually offered in a given term in the course overview BASIS at https://basis.uni-bonn.de.

Please note that the summer/winter distribution can sometimes differ from the general schedule shown in the example curricula. Therefore please check BASIS first!

On the following pages you will find recommended example curricula.
Area D – GEOMETRY AND TOPOLOGY

Start in the Winter Term – October:

- **Option I**
  1. Algebraic Topology I
  2. Algebraic Topology II (+ Topics)
  3. Topics
  4. (Topics)

- **Option II**
  1. Topology I + Algebraic Topology I
  2. Algebraic Topology II
  3. Topics
  4. (Topics)

---

### Example Curriculum – Major Area D – Start in the Winter Term (October)

<table>
<thead>
<tr>
<th>Major (Area D)</th>
<th>Minor (Area A)</th>
<th>Minor (other)</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Algebraic Topology I</td>
<td>Graduate Seminar</td>
<td>Representation Theory I</td>
<td>e.g.\ Discrete Mathematics Analysis \ Practical Teaching Course</td>
</tr>
<tr>
<td>9 CP</td>
<td>6 CP</td>
<td>9 CP</td>
<td></td>
</tr>
<tr>
<td>2. Algebraic Topology II</td>
<td>Graduate Seminar</td>
<td>Representation Theory II</td>
<td>Scientific Computing \ External Internship \ Mathematical Finance</td>
</tr>
<tr>
<td>9 CP</td>
<td>6 CP</td>
<td>9 CP</td>
<td></td>
</tr>
<tr>
<td>3. Advanced Topics</td>
<td>Master's Thesis + Master's Thesis Seminar</td>
<td>e.g. \ 15-20 CP</td>
<td></td>
</tr>
<tr>
<td>7 CP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Selected Topics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 CP</td>
<td>30 CP + 6 CP</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Start in the Summer Term – April:

- **Option I**
  1. Advanced Geometry II
  2. Algebraic Topology I ( + Topics)
  3. Algebraic Topology II
  4. (Topics)

- **Option II**
  1. Analysis and Geometry on Manifolds
  2. Advanced Geometry I ( + Topics)
  3. Advanced Geometry II
  4. (Topics)

### Example Curriculum – Major Area D – Start in the Summer Term (April)

<table>
<thead>
<tr>
<th>Major (Area D)</th>
<th>Minor (Area F)</th>
<th>Minor (Area A)</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 F-Analysis and Geometry on Manifolds 9 CP</td>
<td>Graduate Seminar 6 CP</td>
<td>Stochastic Processes 9 CP</td>
<td>e.g. Practical Teaching Course</td>
</tr>
<tr>
<td>2 Advanced Geometry I 9 CP</td>
<td>Graduate Seminar 6 CP</td>
<td>Algebra II 9 CP</td>
<td>External Internship</td>
</tr>
<tr>
<td>3 Advanced Geometry II 9 CP</td>
<td>Master's Thesis + Master's Thesis Seminar</td>
<td>Stochastic Analysis 9 CP</td>
<td>Mathematical Finance</td>
</tr>
<tr>
<td>4 Selected Topics 5 CP</td>
<td>30 CP + 6 CP</td>
<td></td>
<td>13-18 CP</td>
</tr>
</tbody>
</table>