

## **Area D – GEOMETRY AND TOPOLOGY**

### **Foundation in Geometry and Topology F4D1:**

- **Topology I** (Winter term)
- **Topology II** (Summer term)
- **Geometry I** (not every year)
- **Geometry II** (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**

## **Area D – GEOMETRY AND TOPOLOGY**

### **Recommended Curricula**

#### **Start in 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)

#### **Start in April:**

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

## Example Curriculum- Major Area D – Start in October

	Major (Area D)		Minor (Area A)	Minor (other)	Options
<b>1</b>	Algebraic Topology I <b>9 CP</b>		Graduate Seminar <b>6 CP</b>	Representation Theory I	e.g. Practical Teaching Course External Internship Mathematical Finance <b>15 CP</b>
<b>2</b>	Algebraic Topology II <b>9 CP</b>		Graduate Seminar <b>6 CP</b>	Representation Theory II <b>9 CP</b>	
<b>3</b>	Advanced Topics <b>7 CP</b>	Master Thesis <b>30 CP</b>	Master Thesis Seminar <b>6 CP</b>		
<b>4</b>	Selected Topics <b>5 CP</b>				

## Example Curriculum- Major Area D – Start in April

	Major (Area D)			Minor (Area F)	Minor (Area A)	Options
<b>1</b>	Geometry I		Graduate Seminar	Stochastic Processes		e.g.  Practical Teaching Course  External Internship  Mathematical Finance  <b>15 CP</b>
	<b>9 CP</b>		<b>6 CP</b>	<b>9 CP</b>		
<b>2</b>	Advanced Geometry I	Advanced Topics	Graduate Seminar		Algebra II	
	<b>9 CP</b>	<b>7 CP</b>	<b>6 CP</b>		<b>9 CP</b>	
<b>3</b>	Selected Topics	Master Thesis	Master Thesis Seminar	Stochastic Analysis		
<b>4</b>				<b>5 CP</b>		<b>30 CP</b>