Example Study Plans Master's Degree Program Mathematics

UNIVERSITÄT BONN

Focus A: Algebra, Number Theory and Logic - Model 1
Start: Winter Semester

Sem.	Lecture Courses Area I	Lecture Courses Area II	Lecture Courses Area III	Graduate Seminars (GS)	Master's Thesis	Electives	CP
1	[V4A3] [9] Representation Theory I	[V4D1] [9] Algebraic Topology I	[V4C2] [9] Approximation Algorithms				27
2	[V4A4] [9] Representation Theory II	[V4D2] [9] Algebraic Topology II		[S4A2] [6] GS on Repre-sentation Th.		[P4G1] [9] Pract. Teaching Course	33
3	[V5A5] [7] Adv. Top. in Represent. Th.			[S4D2] [6] GS on Topology	[T5G1] [30] Master's Thesis		31
4	[V5A6] [5] Sel. Top. in Represent. Th.				[S5G1] [6] Master's Thesis Seminar	[MA-INF 2313] [6] Deep Learning for Visual Recognition	29

Focus A: Algebra, Number Theory and Logic - Model 2
Start: Winter Semester

Sem.	Lecture Courses Area I	Lecture Courses Area II	Lecture Courses Area III	Graduate Seminars (GS)	Master's Thesis	Electives	CP
1	[V4A1] [9] Algebraic Geometry I	[V4B1] [9] Nonlinear PDE I	[F4D1] [9] Foundation Topology I				27
2	[V4A2] [9] Algebraic Geometry II	[F4B1-1] [9] F-PDE & Funct. Analysis		[S4A1] [6] GS on Alg. Geometry		[P4G1] [9] Pract. Teaching Course	33
3	[V5A3] [7] Adv. Top. in Alg. Geometry			[S4A3] [6] GS on Adv. Algebra	[T5G1] [30] Master's Thesis		31
4	[V5A4] [5] Sel. Top. in Alg. Geometry			[S4B1] [6] GS on Analysis	[S5G1] [6] Master's Thesis Seminar		29

The detailed study plans represent some of the possibilities and demonstrate the academic feasibility of the various options. The row numbers indicate the con-secutive semesters. The numbers in brackets and in the last column represent the credit points (CP). Only the Master's Thesis and Master's Thesis Seminar are obligatory.

Example Study Plans Master's Degree Program Mathematics

UNIVERSITÄT BONN

Focus A - Algebra, Number Theory and Logic - Model 3

Start: Winter Semester

Sem.	Lecture Courses Area I	Lecture Courses Area II	Lecture Courses Area III	Graduate Seminars (GS)	Master's Thesis	Electives	CP
1	[F4A1] [9] F-Mathematical Logic	[F4B1-3] [9] F-Global Analysis	[V5B2] [5] Sel. Top. in Analysis & PDE	[S4B3] [6] GS on Global Analysis			29
2		[V5B5] [7] Adv. Top. in Analysis & Calc. of Var.	[F4C1-1] [9] F-Lin. & Integer Optimization	[S4A4] [6] GS on Logic		[P4A1] [9] Pract. Project in Math. Logic	31
3	[V4A7] [9] Advanced Mathematical Logic I			[S4A6] [6] GS on Applied Logic	[T5G1] [30] Master's Thesis		33
4	[V4A8] [9] Advanced Mathematical Logic II				[S5G1] [6] Master's Thesis Seminar		27

Focus A - Algebra, Number Theory and Logic - Model 4

Start: Summer Semester

Sem.	Lecture Courses Area I	Lecture Courses Area II	Lecture Courses Area III	Graduate Seminars (GS)	Master's Thesis	Electives	CP
1	[F4A1-4] [9] F-Number Theory		[F4E1-1] [9] F-Scientific Computing I	[S4A3] [6] GS on Adv. Algebra		[P4G1] [9] Pract. Teaching Course	33
2	[V4A5] [9] Advanced Algebra I	[V4D1] [9] Algebraic Topology I		[S4E2] [6] GS on Num. Simulation			24
3	[V4A6] [9] Advanced Algebra II	[V4D2] [9] Algebraic Topology II			[T5G1] [30] Master's Thesis		36
4					[S5G1] [6] Master's Thesis Seminar	[P4G2] [9] External Internship	27

The detailed study plans represent some of the possibilities and demonstrate the academic feasibility of the various options. The row numbers indicate the consecutive semesters. The numbers in brackets and in the last column represent the credit points (CP). Only the Master's Thesis and Master's Thesis Seminar are obligatory.