

Course List for Ph.D. in Mathematics

- 1) Analysis of Several Real variables
- 2) Complex analysis
- 3) Measure Theory
- 4) Functional Analysis
- 5) Algebra I
- 6) Algebra II
- 7) General Topology
- 8) Algebraic Topology
- 9) Differential Geometry
- 10) Commutative Algebra
- 11) Number theory
- 12) Combinatorics
- 13) Advanced Probability
- 14) Markov chains/ Processes
- 15) Stochastic processes

Note: Courses 1) to 10) should be at the level of the corresponding M. Math. courses (or corresponding core courses, if any, of the research courses programme of the Stat Math Unit, Bangalore) and 13) and 15) at the level of M. Stat. MSP specialisation (or the corresponding core courses of the research courses programme of SMU, Bangalore).