



Mathematics Degree Requirements Fall 2014

Important Due Dates for All Degrees

Program of Study (POS may be revised)	December 1
Advanced standing letter to Graduate School signed by Advisor and Chair	December 1
Nomination for Spring graduation	February 1
Nomination for Fall graduation	October 1

MS Degree: 31 Credits (=30+1)

31 Credits course work:

- At least 27 credits in Math: all > 400-level with 15 in >500-level
- Required courses: MTH-435, MTH-436, and MTH-513
- 1 credit (paper reading): MTH-591 or MTH-592

MS Qualifying Examinations (Written)

- Required: MTH-435, MTH-436, and MTH-513 (if failed, retesting allowed with petition)
- Optional Ph.D. comprehensive exams: MTH-515 and MTH-535 to be taken with required exams

Pure Math Ph.D. Degree: 72 Credits (=54+18) and Language

54 Credits for course work beyond Undergraduate Degree

- Required courses: MTH-515, MTH-516, MTH-525, MTH-535, MTH-536, and MTH-562
- With M.A. degree in a Math related field, up to 30 credits are transferable. In this case, all remaining credits must be in >500-level with at most 6 credits may be taken from out of Math with the Chair's permission.
- Without M.A., 15 or less course credits may in the 400-level. In this case, M.S. qualifying exams in MTH-435, MTH-436, and MTH-513 are required. At most 9 credits may be taken from outside of Math with the Chair's permission.

Ph.D. Comprehensive Exams: 8 hours written and an oral exam near the end of course work (If failed, one re-exam permitted if approved by the Graduate School).

- Required: (MTH-435, MTH-436 and MTH-513) MTH-515, MTH-535, and MTH-536
- One course chosen from: MTH-516, MTH-525, or MTH-562
- Additional 3 courses from >500-level (related to research)

18 Credits for Thesis work:

- Doctoral Committee of 3 = Major Professor + 1 Math Faculty + 1 non-Math Faculty (Program of Study needs to be signed by the Doctoral Committee)
- Thesis Defense Committee of 5 = Doctoral Committee + 1 Math Faculty + 1 non-Math Faculty as Chair of TDC. (Oral comprehensive exam and thesis defense are done before TDC).
- Language proficiency in Mathematical French, German, or Russian.

Applied Math Ph.D. Degree Track: 72 Credits (=54+18) and Language

54 Credits for Course work beyond Undergraduate Degree

- With M.A. degree in a Math related field, up to 30 credits are transferable. In this case, all remaining credits must be in >500-level. An area of concentration is selected from which up to 12 Credits may be applied.
- Without M.A. degree, at most 15 course credits may be in the 400-level. In this case, M.S. qualifying exams in MTH-435, MTH-436, and MTH-513 are required. Total credits from Math should be at least 30. An area of concentration is selected from which up to 24 credits may be applied.

Ph.D. Comprehensive Exams: 8 hours written and an oral exam near the end of course work (If failed, one re-exam permitted if approved by the Graduate School).

- Required: MTH-435, MTH-436, either MTH-535 and MTH-536 or MTH-629 and MTH-630
- Two courses from MTH-513, MTH-515, MTH-535, MTH-545, MTH-547, MTH-548, MTH-629 one of which must be MTH-513 or MTH-515
- Additional 4 courses from >500-level (related to research)

18 Credits for Thesis work and Language: similar to Pure Math Ph.D.