

Department of Mathematics and Statistics: Doctoral Plan Of Study

Student: _____ Program: Ph.D. in Computational Mathematics

Advisor: _____

COURSEWORK (MINIMUM 48 CREDIT HOURS)

SEMESTER & YEAR

Choose at least 48 credit hours of approved coursework.

- STA 642 Statistical Computing _____
- STA 651 Mathematical Statistics _____
- STA 652 Mathematical Statistics _____
- STA 661 Advanced Statistics in the Behavioral and Biological Sciences I _____
- STA 662 Advanced Statistics in the Behavioral and Biological Sciences II _____
- STA 671 Multivariate Analysis _____
- STA 673 Statistical Linear Models _____
- STA 675 Advanced Experimental Design _____
- STA 676 Sample Survey Methods _____
- MAT 701 Graduate Seminar in Computational Mathematics
(____ credit hours) _____
- STA 701 Seminar in Computational Statistics
(____ credit hours) _____
- MAT 709 Topics in Computational Mathematics
(____ credit hours) _____
- STA 709 Topics in Computational Statistics
(____ credit hours) _____
- MAT 721 Mathematical Cryptography _____
- MAT 723 Numerical Mathematics _____
- MAT 724 Numerical Mathematics _____
- MAT 726 Finite Element Methods _____
- MAT 727 Linear Algebra and Matrix Theory _____
- MAT 728 Linear Algebra and Matrix Theory _____
- MAT 731 Combinatorics _____
- MAT 732 Graph Theory _____
- MAT 735 Ordinary Differential Equations _____

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|--|-------|
| <input type="checkbox"/> MAT 736 Partial Differential Equations | _____ |
| <input type="checkbox"/> MAT 737 General Topology | _____ |
| <input type="checkbox"/> MAT 738 General Topology | _____ |
| <input type="checkbox"/> MAT 740 Modern Abstract Algebra | _____ |
| <input type="checkbox"/> MAT 741 Modern Abstract Algebra | _____ |
| <input type="checkbox"/> MAT 742 Computational Number Theory | _____ |
| <input type="checkbox"/> MAT 743 Complex Analysis | _____ |
| <input type="checkbox"/> MAT 745 Real Analysis | _____ |
| <input type="checkbox"/> MAT 746 Real Analysis | _____ |
| <input type="checkbox"/> MAT 747 Computational Topology | _____ |
| <input type="checkbox"/> MAT 748 Computational Algebra | _____ |
| <input type="checkbox"/> MAT 790 Directed Doctoral Research
(____ credit hours) | _____ |
| <input type="checkbox"/> MAT 799 Dissertation
(____ credit hours) | _____ |
| _____ | _____ |
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Choose additional electives that do not count toward the required 48 hours.

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|---|-------|
| <input type="checkbox"/> MAT 595 Mathematical Analysis | _____ |
| <input type="checkbox"/> MAT 596 Mathematical Analysis | _____ |
| <input type="checkbox"/> MAT 601 Seminar in the Teaching of Mathematics I | _____ |
| <input type="checkbox"/> MAT 602 Seminar in Mathematical Software | _____ |
| <input type="checkbox"/> MAT 603 Practicum in the Teaching of Mathematics | _____ |
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| _____ | _____ |

PRELIMINARY EXAMINATION

MONTH & YEAR

Written component Chose two areas.

- Mathematical Analysis
- Linear Algebra and Matrix Theory
- Mathematical Statistics

Oral component

DISSERTATION RESEARCH

Include 18–21 credit hours of MAT 799 Dissertation in required 48 hours.

Dissertation committee: _____(Chair)

Oral topic proposal and defense _____

Written dissertation research outline _____

Oral dissertation presentation and defense _____

SIGNATURES

Sign and print below.

Student: _____ Date: _____

DGS: _____ Date: _____
