GRADUATE PROGRAM IN

MATHEMATICS

Program of Study

The Department offers work leading to the degree of Master of Arts in Mathematics. The program outlined below offers the student three "pathways" or tracks for advanced study in mathematics: pure, interdisciplinary, and statistical. All paths provide both thesis and non-thesis options. At the time of admission, an interim advisory committee will be assigned to assist the student in developing a course of study consistent with both one of the three tracks and his/her specific needs and/or future plans.

I. Base Requirements: All three tracks require at lease 30 credit hours, including two semesters of the Graduate Research Seminar, MAT 590. Credits must be distributed as follows:

A. Thesis Option: A minimum of 21 credit hours (of which 6 are thesis credits) must be at the graduate level. A program of study must be developed and approved by the student's advisory committee. Upon completion of the course of study and the thesis, the student must present an oral defense of the thesis.

B. Non-thesis Option: A minimum of 24 credit hours must be at the graduate level. Written comprehensive examinations must be taken in the semester prior to graduation; no oral examinations are required.

II. Track Requirements: (All unspecified course work is by the student with the approval of his/her advisory committee.)

A. Pure Mathematics - All students are required to take MAT 523, MAT 527, MAT 563 and at least two courses from MAT 531, 557, 577, and 587 as 12 of the required credit hours.

B. Interdisciplinary Mathematics - All students are required to take MAT 523, MAT 527, and MAT 557 as 9 of the required credit hours. For both the Thesis and Non-thesis options, up to 12 of the remaining required credit hours may be taken in one or more other disciplines.

C. Statistics - All students are required to take MAT 523, MAT 531, and MAT 532 as 9 of the required credit hours. In addition, students are required to take a course in Linear Statistical Models through a 3-credit special topics course or reading course.

Financial Aid

A limited number of graduate assistantships and other financial aid are available on a competitive basis each year. Students interested should send a letter and resume to the Graduate Program Office, Maine Business School requesting consideration for financial aid. Applications for financial aid should be received by February 15 for the following academic year. A definite decision on financial aid is made only after an applicant has been fully admitted to the Graduate School.

Applying

In addition to satisfactory performance of the candidate as an undergraduate, as evidenced by transcripts, letters of recommendation, and G.R.E. scores, the Department requires one semester of advanced calculus (equivalent to MAT 425) and one semester of abstract algebra (equivalent to MAT 463). Occasionally, students can be admitted with a deficiency in one of these areas if the deficiency is made up in the first year of graduate study. Application forms can be obtained from the Graduate School.

Correspondence

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Graduate Faculty

Eisso Atzema, Ph.D. (Utrecht, Netherlands, 1993), Lecturer. History of mathematics, geometry, mathematics education.

David M. Bradley, Ph.D. (University of Illinois, Urbana 1995), Associate Professor. Analysis, number theory, special functions, difference differential equations.

William O. Bray, Ph.D. (Missouri, 1981), Professor. Classical analysis, harmonic analysis.

Robert Franzosa, Ph.D. (Wisconsin, 1984), Professor. Applied topology.

Pushpa L. Gupta, Ph.D. (Wayne State, 1970), Professor. Statistics, biostatistics, reliability theory, multivariate analysis and modeling.

Ramesh C. Gupta, Ph.D. (Wayne State, 1970), Professor. Statistics, biostatistics, probability, stochastic processes, reliability theory, mathematical models.

William Halteman, Ph.D. (Washington, 1980), Associate Professor. Biostatistics.

David Hiebeler, Ph.D. (Cornell, 2001), Associate Professor. Mathematical Biology.

Andre Khalil, Ph.D. (Univserite Laval, Canada, 2004), Applied Mathematics.

Andrew Knightly, Ph.D. (UCLA, 2000), Assistant Professor. Number theory.

Sergey Lvin, Ph.D. (University of Moscow, Russia, 1977), Lecturer. Partial differential equations, applied mathematics.

Ali E. Ozluk, Ph.D. (Michigan, 1982), Professor. Analytic number theory.

Tod Shockey, Ph.D. (Virginia, 2000), Associate Professor of Mathematics Education.

William M. Snyder, Ph.D. (Maryland, 1977), Professor. Number theory.