Master of Arts in Applied and Computational Mathematics

ABOUT THE M.A. IN APPLIED AND COMPUTATIONAL MATHEMATICS

Through the 33-credit M.A. in Applied and Computational Mathematics program, computer programs are used to solve real-world mathematical problems. You develop and analyze mathematical models of physical and biological phenomena and engineering systems, interpret the solutions of these problems in the context of what they model, and use the results to identify relationships, patterns, and the effects of altering one or more variables or modeling assumptions.

Courses covering topics such as software systems, computer algorithms, formal language theories, and database management systems provide you with the research, analytical, and communication skills to succeed in any career path you choose. Thanks to our small class sizes, you receive individual attention from faculty to guide your research and help you make career connections. Full-time students can complete the degree in two years, with classes scheduled to accommodate working professionals.

WHAT CAN I DO WITH AN M.A. IN APPLIED AND COMPUTATIONAL MATHEMATICS?

The M.A. in Applied and Computational Mathematics is a versatile and in-demand degree for employment. Effective use of advanced applied mathematical techniques has become increasingly important in industrial, business, and scientific settings, which rely on sophisticated software to solve complex problems. The ability to construct and analyze specific mathematical models, and develop and efficiently execute computational mathematical algorithms, is needed in virtually any field.

Once you graduate with your M.A., you are able to pursue further doctoral study in mathematics or find immediate employment related to high-growth fields such as materials science; data mining and data privacy; computer animation and digital imagery; finance and economics; ecology; systems biology; climatology; and epidemiology.

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EMPLOYERS SEEKING CANDIDATES WITH ADVANCED DEGREES IN APPLIED MATHEMATICS INCLUDE

- Academic institutions and research institutes
- Aerospace and transportation equipment manufacturers
- Chemical or pharmaceutical manufacturers
- Communications service providers
- Computer information and software firms
- Consulting firms
- Consumer products companies
- Electronics and computer manufacturers
- Energy systems firms
- Engineering research organizations
- Federally-funded contractors
- Financial service and investment management firms
- Government laboratories, research offices, and agencies
- Medical device companies
- Producers of petroleum and petroleum products
- Transportation service providers

MESSAGE FROM THE DIRECTOR

The M.A. in Applied and Computational Mathematics at St. John's University is a versatile degree that allows you to deepen your math and computer science knowledge. It provides you with a solid foundation in these subjects from which you may pursue further doctoral research or advancement in a range of exciting career fields.

Our department features a faculty of active scholars who are devoted to student success. Each student receives individual attention from faculty members, who provide research and career guidance. We hope you will join the warm and lively intellectual culture of our program. Feel free to contact me with any questions, and welcome to St. John's!

Florin Catrina, Ph.D.
Associate Professor and Graduate Director, Department of Mathematics and Computer Science
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RESEARCH AND PROFESSIONAL DEVELOPMENT

Because of the low student-to-faculty ratio within the mathematics program, you work closely with professors on independent research in preparation for your career. The Department of Mathematics and Computer Science also notifies you of potential internship opportunities as they become available and assists you in the internship application process as needed. Our faculty members are active scholars who are dedicated to helping each student succeed.

ASSISTANTSHIPS, SCHOLARSHIPS, AND FINANCIAL AID

The University awards a limited number of graduate assistantships to highly qualified students every year. These positions provide tuition remission and a stipend and involve assisting faculty with their research. For more information about assistantships, scholarships, and other types of financial aid, please visit the Graduate Admissions page at **stjohns.edu/admission/graduate**.

PROGRAM INFORMATION AND APPLICATIONS

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