Application Process

Visit www.graduate.vcu.edu for the application. Deadlines are March 1 for fall admission and October 1 for spring admission. For additional information, see the departments web page: www.math.vcu.edu

Graduate Teaching Assistantships

Each year the department has a number of graduate assistantships available for full-time graduate students. These carry a stipend and remission of tuition. As a GTA, you will be part of an energetic faculty highly committed to excellent teaching and research. Contact the Director of Graduate Studies for information on Graduate Teaching Assistantships.

The Graduate Director is happy to answer any question you may have about the program.

Graduate Director

Richard Hammack
Virginia Commonwealth University
Dept. of Mathematics and Applied Mathematics
1015 Floyd Ave.
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804-828-1301

VCU
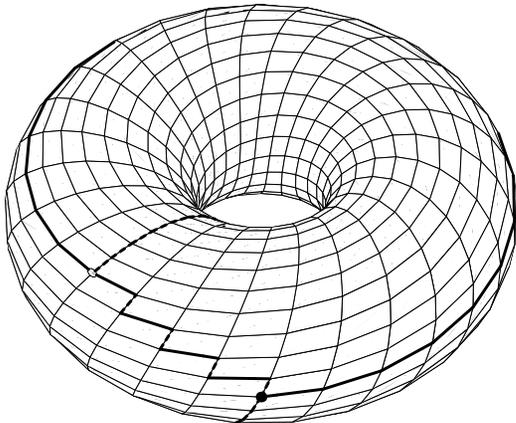
VIRGINIA COMMONWEALTH UNIVERSITY
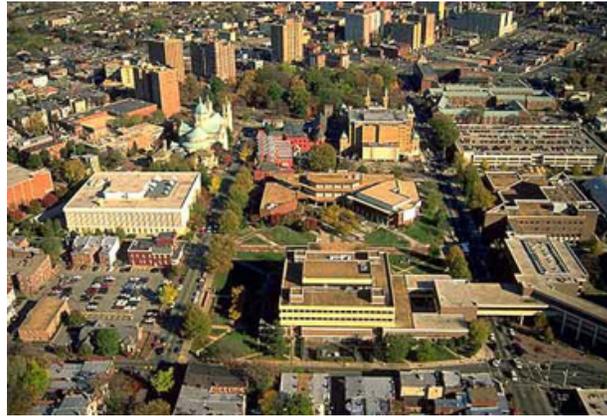
The Monroe Park Campus is part of a historic neighborhood near downtown Richmond. The Department of Mathematics and Applied Mathematics is housed in Harris Hall, the building in the lower center of this photograph.

Scenes from the heart of campus. Above: Student Commons. Right: University offices on Franklin Street.

Virginia Commonwealth University

Department of Mathematics and Applied Mathematics
1015 Floyd Avenue — Richmond, Virginia 23284
Phone: (804) 828-1301
www.math.vcu.edu

VCU

VIRGINIA COMMONWEALTH UNIVERSITY

Mathematics Graduate Program
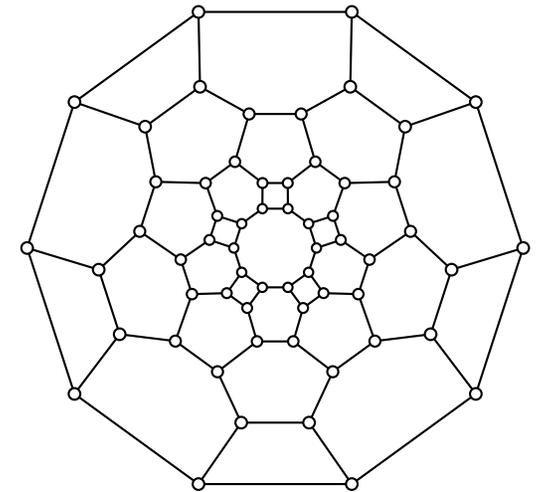
Graduate Study in Mathematics

Virginia Commonwealth University enrolls over 32,000 students on two campuses — the Monroe Park Campus, and the Medical College of Virginia Campus — in Richmond, Virginia, a city with a rich history and a vibrant music, arts and cultural scene.

The Department of Mathematics and Applied Mathematics, in conjunction with the Department of Statistics and Operations Research, offers programs leading to the masters and Ph.D. degrees.

Program strengths include
- Applied Mathematics
- Biomathematics
- Discrete Mathematics

Specific research areas include analysis, algebra, combinatorics, control theory, difference equations, graph theory, image processing, logic, numerical analysis, and ordinary and partial differential equation modeling.

The department consists of 20 tenured or tenure track professors, all actively involved in current research and dedicated to excellent teaching at all levels.

Masters Program

The department offers a program leading to a Master of Science in Mathematical Sciences. Masters students may choose concentrations in mathematics or applied mathematics. The program is flexible and is designed to meet the needs of students with a wide variety of interests, backgrounds and career plans.

Degree Requirements
To attain the masters degree, the candidate must complete 30 credit hours of graduate level courses in mathematics or a closely related field, including a 600-level sequence in mathematics, and at least one hour of research seminar. Candidates may choose between a thesis and a non-thesis option. For the thesis option, the candidate selects a faculty member to direct a 3- or 6-credit thesis; these credits count toward the 30 credits needed for graduation. Those selecting the non-thesis option typically complete a directed research project, and must pass a comprehensive exam. Further details can be found in the Graduate Bulletin: www.pubapps.vcu.edu/Bulletins/graduate/

Admission Requirements
A student applying for admission to the Masters of Science program is expected to have at least 30 undergraduate semester credits in the mathematical sciences or closely related fields, with at least 18 of these credits in upper-level (junior level or higher) courses. The department makes an effort to structure its course offerings so that a student who has majored in one area may do graduate work in another. A student changing areas may be required to take additional courses. The graduate program director will advise applicants on appropriate courses so that they start their graduate studies with the best possible grounding.

All applicants must submit a report of current scores achieved on the GRE. All international students must take the TOEFL.

Doctoral Program

A Doctor of Philosophy in Systems Modeling and Analysis is offered jointly by the Department of Statistical Sciences and Operations Research and the Department of Mathematics and Applied Mathematics. This interdisciplinary program focuses on the development of the mathematical and computational skills used to model and analyze real-world systems. The doctoral curriculum enables students to expand the frontiers of knowledge through original, relevant research involving quantitative and qualitative complex systems derived from real, contemporary problems facing our world.

Degree Requirements
The candidate must earn at least 57 graduate-level credits, including the following first-year courses:

MATH 532 Ordinary Differential Equations I (3 credits)
OPER 639 Practical Optimization (3 credits)
STAT 546 Linear Models (3 credits)

Also required: 3 credits of SYSM 681 (Systems Seminar), 9 credits of SYSM 692 (Systems Research), and 18 elective credits at the 600 and 700 level.

Candidates must qualify for Admission to Candidacy based on a portfolio of work from the above courses, and subsequently write and successfully defend a dissertation. See the Graduate Bulletin for further details: www.pubapps.vcu.edu/Bulletins/graduate/

Admission Requirements
In addition to the general requirements for admission the Graduate School, a wide range of preparatory courses are required for admission to this interdisciplinary program. The candidate must have completed an undergraduate degree with at least 30 credits of mathematics, including calculus I and II, multivariate calculus, linear algebra, probability and statistics. The candidate must have completed the following graduate courses: optimization, mathematical statistics I and real analysis. A student who lacks some of the graduate course requirements may be admitted provisionally.