# Bachelor of Arts in Mathematics

### FACT

The nation's three best jobs in terms of income and other factors — the list is headed by mathematicians, actuaries and statisticians — are careers suited for math majors. Of the study's top ten jobs, three others also require extensive math skills. *Source: "A Comprehensive Ranking of 200 Different Jobs," CareerCast.com, 2009* 

### In Demand

In our highly technical world, the demand continues to grow rapidly for qualified people who can understand and use the language of mathematics. A command of mathematical skills and processes enables you to deal efficiently and effectively with complex problems and large amounts of data to solve practical problems or propose theoretical alternatives. The importance and uses of modern mathematics has never been as great.

## **Outstanding Preparation**

GSU's undergraduate major in mathematics offers a balance between theoretical and applied study, with the general objective of providing you with a substantial and broad background in mathematics. You have the opportunity to develop skills in logical thinking, problem analysis, problem solving, and computer usage that prepares you for graduate studies in a number of academic areas.

## A Choice of Careers

Successful completion of coursework in the mathematics major prepares you for employment in diverse careers where mathematical skills are required, including medicine, business, education, government, computer science, and engineering.

### **Unlimited Opportunity**

GSU offers superior educational opportunity at an affordable tuition rate while maintaining the professional quality of its programs. GSU's outstanding faculty and real-world curriculum prepare graduates to meet the demands of the future.

## **Faculty Advisor:**

Dr. Dianna Galante Academic Program Coordinator Faculty Advisor 708.534.4127 dgalante@govst.edu www.govst.edu/math

2016 – 17 Catalog Year



# Bachelor of Arts in Mathematics

# College of Arts and Sciences

### **Degree Requirements**

Students must meet all university requirements for a bachelor's degree.

In addition, only grades of "C" or better will be accepted for transfer for the following courses normally taken at the lower-division level: three hours of college algebra and trigonometry (as prerequisites), Calculus I, Calculus II, Calculus III, discrete mathematics, geometry, linear algebra, and modern algebra.

### General Education (37 – 41 Hours)

The following courses must be taken to meet major and general education requirements:

General Biology I with Laboratory (4) Physics I with Laboratory (4) MATH - 2290 Calculus I (4)

### **Required Courses (44 hours)**

The following courses can be taken at either the lowerdivision or upper-division level:

MATH - 2150 Discrete Mathematics (3) MATH - 2271 Differential Equations (3) MATH - 2292 Calculus II (4) MATH - 2294 Calculus III (4) MATH - 2449 Linear Algebra (3) MATH - 4337 Modern Geometry (3) MATH - 4451 Modern Algebra (3) PHYS - 2143 Intermediate Physics II (3) PHYS - 2144 Intermediate Physics Lab II (1)

The following courses must be taken at the upperdivision level:

MATH - 4133 Number Theory (3) MATH - 4171 History of Mathematics (3) MATH - 4241 Analysis I: Real Variables (3) MATH - 4243 Analysis II: Complex Variable (3) MATH - 4557 Probability (3) MATH - 4637 Mathematics Laboratory (3)

#### **Computer Science Selective (3 – 4 Hours)**

Select one of the following which may be taken at either the lower-division or upper-division level:

CPSC - 2005 Introduction to Computer Technology (3) CPSC - 3120 Visual BASIC (3) CPSC - 3142 Intro. to C++ (3) CPSC - 3143 Intro. to C++ Laboratory (1)

### **Selective Hours (6)**

Select 6 hours (2 courses) from the following upperdivision mathematics and statistics courses:

MATH - 4229 Advanced Calculus (3) MATH - 4373 Topology (3) STAT - 4219 Statistical Methods (3) OR Other courses approved by the academic advisor.

### Elective (25 – 30 Hours)

May include credit-hours needed to meet minor requirements.

### Total - 120 Hours

2016 – 17 Catalog Year

Governors State University is accredited by the Higher Learning Commission of the North Central Association of Colleges and Schools. This information is for reference only. For complete degree information, please refer to the current approved Governors State University catalog online at www.govst.edu/catalog.