



## Bachelor of Science

### University Profile

The University of Saint Francis was founded in 1890 and has a rich heritage of offering quality education. Rooted in the Catholic and Franciscan traditions of Faith and Reason, the University of Saint Francis engages a diverse community in learning, leadership and service.

The campus has 108 acres of rolling lawns and trees with 19 buildings and four residence halls that surround beautiful Mirror Lake.

### Mathematics Program

The Department of Mathematics offers a quality education in the liberal arts tradition. The program is open to students with strong mathematical and logical interests and abilities.

The Mathematics program features integration between theoretical math and problem solving. The degree provides a well-rounded preparation for future scientists, analysts and problem solvers. The course work includes traditional aspects of successful math education, such as the history of mathematics, logic, physics, and technology-based and problem-solving driven components.

### Mathematics Faculty

The faculty is dedicated to excellent teaching. Small class sizes optimize interactions between professors and students, enabling them to get to know each other.

The major objectives of the Department of Mathematics are to help students increase their knowledge and understanding of mathematical concepts, develop their reasoning and

problem solving skills, and improve their ability to apply mathematics.

### Applications of Mathematics

In a number of areas, the opportunities to advance educationally and professionally will be enhanced with a mathematical background and the following skills:

1. Quantitative skills (basic statistics): Social Science, Journalism, Sociology, Economics, Psychology, Human Resources (compensation and benefit analysis, pension assets management, finance)
2. Ability to draw conclusions from data: Data Analysis, Data Synthesis, Quality Control
3. Problem-solving, analytical and logical thinking: Planning, Structuring, Project Management, Materials Management, Inventory Management
4. Problem solving skills: Engineering
5. Logical reasoning and computational techniques: Sciences

### Demand for Mathematicians

There is a great demand today for individuals with strong analytical skills and experience in problem solving, logical reasoning and various applications based on modern technology.

The U.S. is experiencing a chronic shortage of qualified math educators, math researchers, statisticians, actuaries, commodities traders, quantitative analysts and bank analysts, appraisers, designers, pollsters, epidemiologists, simulators, and other specialists with mandatory mathematical background.

### Sample Curriculum

(129 credit hours)

FRESHMAN YEAR  
Fall (15 hours)

Algebra and Trig	3
Informal Geometry	3
Calculus I	3
English Composition I	3
iConnect	3

Spring (15 hours)

Statistics	3
Logic	3
Calculus II	3
Religion General	
Education Requirement	3
Social Science General	
Education Requirement	3

SOPHOMORE YEAR  
Fall (16 hours)

College Geometry	3
Physical Education General	
Education Requirement	3
Discrete Mathematics	3
Elective	3
Physics I and Lab	4

Spring (17 hours)

Linear Algebra	3
Mathematics Lab I	3
Physics II and Lab	4
Special Problems in Math	1
History General	
Education Requirement	3
Theology General	
Education Requirement	3

JUNIOR YEAR  
Fall (18 hours)

History of Mathematics	3
Mathematics Lab II	3

Differential Equations	3
Computer Programing and Design	3
Philosophy/Ethics General	
Education Requirement	3
Elective	3
Spring (16 hours)	
Cryptology	3
Abstract Algebra	3
Special Problems in Math	1
Cultural Diversity and Human Rights	3
Fundamentals of	
Public Communication	3
Literature General	
Education Requirement	3
SENIOR YEAR	
FALL (17 HOURS)	
Math Riddles and Games	3
Special Problems in Math	2
Social and Environmental General	
Education Requirement	3
Fine Arts Requirement	3
Elective	3
Elective	3
Spring (15 hours)	
Math Olympiad	3
Special Problems in Math	3
Problem Solving (capstone)	3
Elective	3
Elective	3

### **Student Financial Aid**

Financial aid is available in the form of scholarships, grants, loans, and work study. More than 95 percent of undergraduate students receive financial assistance; most receive more than one type of aid. Early estimator packages are available for dependent students during the fall at [www.sf.edu/financialaid](http://www.sf.edu/financialaid).

All students are encouraged to complete the Free Application for Federal Aid (FAFSA). Priority deadline is no later than March 10.

### **For More Information**

Call the Office of Admissions at 260-434-3279 or 1-800-729-4732, or visit our website at [www.sf.edu](http://www.sf.edu).