# Bachelor of Science in Chemistry

# College of Arts and Sciences

### **FACT**

The median salary nationally for employees with a Bachelor of Science in Chemistry in 2009 was \$67,500.

Source: Median salaries for chemists with a bachelor's degree 2009 American Chemical Society

### **Deciphering the World**

Chemistry is the study of how substances behave and how their properties are changed. It is the central science that provides the framework for understanding a wide variety of natural phenomena, issues in society, and advances in technology. A chemistry degree gives you the background for a career in science or science-related fields, including medicine, dentistry, education, environmental science, forensic science, pharmaceuticals, and scientific writing.

### **Firm Foundation**

At Governors State University, the B.S. in Chemistry program provides a strong foundation in the basic concepts of analytical, organic, physical, biochemistry, and inorganic chemistry. Laboratory courses give you hands-on experience with a variety of modern scientific instruments. You will acquire the skill to work in government and industrial laboratories in a variety of positions, and have the necessary preparation for graduate studies in chemistry.

### **Professional Certification**

All qualified graduates will receive certification from the American Chemical Society. Students qualify for certification by completing the program's degree requirements, including at least six semester hours of advanced courses and 500 laboratory hours.

### **Unlimited Opportunity**

GSU offers a 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.

### **Program Information:**

Diane Gohde Academic Advisor 708.534.8453 dgohde@govst.edu



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### **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: eight hours of general chemistry with laboratory, eight hours of organic chemistry with laboratory, eight hours of physics with laboratory, and eight hours of calculus.

### **General Education Requirement (37 – 41)**

The following courses must be taken, at the lower-division level, to meet major and general education requirements:

General Chemistry I with Laboratory (4) Calculus I (4)

### **Required Courses (58 Hours)**

The following courses must be taken, at the lower-division level, to meet major and general education requirements:

General Chemistry I with Laboratory (4) Calculus I (4)

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

Organic Chemistry with Laboratory (8)

Physics with Laboratory (8)

CHEM - 3233 Analytical Chemistry (3)

CHEM - 3234 Analytical Chemistry Laboratory (1)

MATH - 2271 Differential Equations (3)

The following courses must be taken at the upper-division level:

CHEM - 3099 Chemistry Junior Seminar (3)

CHEM - 3641 Physical Chemistry I Lecture (3)

CHEM - 3642 Physical Chemistry I Laboratory (1)

CHEM - 3643 Physical Chemistry II Lecture (3)

CHEM - 3644 Physical Chemistry II Laboratory (1)

CHEM - 4743 Instrumental Analysis (3)

CHEM - 4744 Instrumental Analysis Laboratory (1)

CHEM - 4443 Advanced Inorganic Chemistry (3)

CHEM - 4444 Advanced Inorganic Chemistry Lab (1)

CHEM - 4552 Intro to Chem. Software (1)

CHEM - 4331 Biochemistry Lecture (3)

CHEM - 4332 Biochemistry Laboratory (1)

STAT - 4219 Statistical Methods (3)

CHEM - 4965 Sen. Capstone & Thesis in Chemistry (3)

### **Advanced Laboratory Selective (2 Hours)**

CHEM - 4952 Org. Synthesis & Structural Methods (2) CHEM - 4962 Undergraduate Research Experience (2)

#### **Biology or Computer Science Selective (3 Hours)**

Select one of the following Computer Science courses or one Biology course, any of which may be taken at either the lower-division or upper-division level:

CPSC - 2005 Introduction to Computer Technology (3)

CPSC - 3120 Computer Programming: Visual BASIC (3)

### **Advanced Selectives (6 Hours)**

Select six hours from the following courses.

CHEM - 4333 Analytical Biochemistry (2)

CHEM - 4334 Analytical Biochemistry Laboratory (1)

CHEM - 4990 Chemistry Research (1-3)

CHEM - 5145 Environmental Chemistry Lecture (3)

CHEM - 5146 Environmental Chemistry Laboratory (1)

CHEM - 5157 Polymer Chemistry (3)

NOTE: Other science courses as approved by academic advisor.

## Electives (7 – 11 Hours)

### Total - 120 Hours

\* May be used to meet the general education requirements and will increase the number of electives required.

2016 - 17 Catalog Year

