

## **FACT**

Jobs for computer scientists and database administrators with bachelor's degrees are expected to grow 18.62 percent from 2012 to 2022 and jobs for network systems and data communications analysts are expected to grow more than 11.28 percent in the same period. *Source: Occupational Outlook Handbook 2012 – 13, Bureau of Labor Statistics*

Our increasingly technological society has resulted in an ever-growing demand for computer science graduates. At GSU, you will learn to use state-of-the-art technology, to use computers to solve real-world problems, and to work with a team and technology to succeed.

GSU's program provides a balance between theoretical and applied study, with experiences leading to expertise in subjects ranging from website creation to networking problems. You study theory in the classroom and gain practical experience in the computer lab.

Internships with the university, local businesses, and national research organizations help enhance the computer science program.

## **Outstanding Preparation**

Governors State University's Bachelor of Science program in Computer Science prepares you for profitable careers in a technology dependent world demanding both theoretical and practical knowledge. You may work in business and industry, in government agencies, or in research and technical organizations as programmers, network professionals, systems designers, software engineers, and database professionals.

You also acquire the necessary background for graduate studies in computer science or related fields. Courses include Application Design, Project Development, Networks and Database Management, and Security.

## **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.

## **Faculty Advisor:**

Freddie Kato  
University Lecturer  
Faculty Advisor  
[fkato@govst.edu](mailto:fkato@govst.edu)  
708.235.6833  
[www.govst.edu/cpsc](http://www.govst.edu/cpsc)



# Bachelor of Science in Computer Science

# College of Arts and Sciences

## Degree Requirements

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

In addition, students must complete the following course work with a grade of "C" or better: CPSC-2100, CPSC-3310, CPSC-3148, CPSC-4190, and CPSC-4205.

## General Education Requirement (38 – 41 Hours)

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

MATH-2281 Applied Calculus (3)

## Foundation Courses (3 – 6 Hours)

CPSC-2100 Introduction to Computing (3)  
CPSC-3148 Computer Programming: Java (3)

## Required Courses (30 Hours)

CPSC-3099 Junior Seminar (3)  
CPSC-3310 Intro To Object-oriented Programming (3)  
CPSC-4190 Introduction to Software Engineering (3)  
CPSC-4205 Computer Organization (3)  
CPSC-4335 Operating Systems (3)  
CPSC-4338 Discrete Structures (3)  
CPSC-4342 Introduction to Computer Networks (3)  
CPSC-4345 Database Systems (3)  
CPSC-4355 Data Structures and Algorithms (3)  
CPSC-4900 Senior Project and Seminar (3)

## Advanced Selective Courses (27 Hours)

### Computer Animation/Graphics:

CPSC - 4565 3D Modeling (3)  
CPSC - 4566 3D Animation (3)  
CPSC - 4567 3D Rendering (3)  
CPSC - 4569 Intro to 3D Visual Effects (3)

### Computer Programming:

CPSC-3145 Computer Programming: Intro to C++ (3)  
CPSC-4148 Advanced Programming Using Java (3)  
CPSC-4520 Visual Basic.NET II (3)  
CPSC-4435 Secure Programming (3)

### Computer Systems:

CPSC-4535 Introduction to the UNIX System (3)  
CPSC-4570 Windows Systems (3)  
CPSC-4572 Advanced Windows Administration (3)  
IT-4455 Securing Operating Systems (3)

### Database Systems:

CPSC-4358 Database Programming (3)  
CPSC-4576 Database Design & Admin SQL Servers (3)  
CPSC-4790 Data Mining and BI (3)

### Game Design:

CPSC-4566 3D Animation (3)  
CPSC-4630 Game Modeling and Animation (3)  
CPSC-4631 Game Design (3)

### Web/Mobile Applications:

CPSC-4137 Web Applications (3)  
CPSC-4437 Web Application Development II (3)  
CPSC-4530 Mobile App Developments (3)

## Electives (16 – 23 Hours)

## Total - 120 Hours

2016 – 17 Catalog Year

