

# Department of Computer Science

---

---

The department's offerings include theoretical-based computer science courses as well as a solid foundation in algorithm design and implementation. Major "core" courses in computer science reflect a broad emphasis and a great variety of electives to prepare graduates for one of the fastest growing careers in the world.

## Program Educational Objective (3-5 years after graduation)

- have a diverse group of graduates take on successful leadership roles in Computer Science related fields;
- have graduates remain current in their field through the pursuit of life-long learning;
- have graduates work effectively with others to make positive contributions to their employers and to society.

## Outcomes

Upon graduation, students with a BS majoring in Computer Science will have:

- an ability to apply knowledge of computing and mathematics appropriate to the discipline;
- an ability to analyze a problem, and identify and define the computing requirements appropriate to its solution;
- an ability to design, implement and evaluate a computer-based system, process, component, or program to meet desired needs;
- an ability to function effectively on teams to accomplish a common goal;
- an understanding of professional, ethical, legal, security, and social issues and responsibilities;
- an ability to communicate effectively with a range of audiences;
- an ability to analyze the local and global impact of computing on individuals, organizations, and society;
- recognition of the need for, and an ability to engage in, continuing professional development;
- an ability to use current techniques, skills, and tools necessary for computing practices;
- an ability to apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer-based systems in a way that demonstrates comprehension of the tradeoffs involved in design choices;
- an ability to apply design and development principles in the construction of software systems of varying complexity.

The CS program is accredited by the Computing Accreditation Commission of ABET, <http://www.abet.org>.

## Programs

### Majors

- Computer Science B.S. (<http://catalog.georgiasouthern.edu/undergraduate/allen-paulson-engineering-computing/computer-science/computer-science-bs>)

### Minors

- Computer Science Minor (<http://catalog.georgiasouthern.edu/undergraduate/allen-paulson-engineering-computing/computer-science/computer-science-minor>)