



COMPUTER SCIENCE

Computer science is aimed at solving problems by using one of the modern world's most powerful tools, computers. Computer scientists must learn how computers work and “think,” then they perform the complex critical thinking and coding required to translate problems into a format computers can understand and solve. Today, computer science is a rapidly evolving discipline that affects almost every industry and problem in the modern world.

What Do Computer Scientists Do?

Computer science involves programming computing devices, creating information systems, engineering new products, visualizing and creating imagery, working with data infrastructure and networks, and protecting information through cybersecurity. Computer scientists can focus on software development, databases and analytics, cybersecurity, computer graphics and visualization, video game design, among others.

Concentrations

Software Engineering (SEG)—The field of SEG involves developing quality software, meeting project deadlines and budget parameters, and ensuring software is built systematically to requirements and design specifications.

Cloud Computing and Networking (CCN)—The field of CCN involves a system which utilizes multiple computers distributed, connected in real time, and running software that collaborates to provide work (service) to a customer (the user).

Data Science and Analytics (DSA)—The field of DSA incorporates techniques and theories from diverse areas such as mathematics, biology, statistics, data warehousing, and artificial intelligence.

Computer Science and Second Discipline—The concentration permits a 15-hour study area outside of computer science. Students may select an official LSU minor or customize a study plan following department guidelines.

Cybersecurity (CYB)—The field of CYB involves protecting networks, devices, and data from unauthorized access or criminal use and ensuring confidentiality, integrity, and availability of information.

PROGRAM FACTS

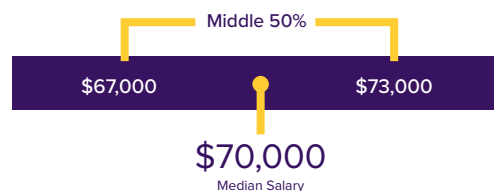
2020–2021 Enrollment: 793 Students

Common Minors: Digital Media Arts and Engineering (DMAE), Robotics, eCom-merce, Information Technology Manage-ment, Mathematics, Business Administra-tion (BADM)

Student Organizations:
 ACM—Association of Computer Machinery
 WICS—Women in Computer Science
 DSC—Developer Student Club
 SSL—Security Society at LSU

GRADUATE STARTING SALARIES

Median full-time in field salary info for graduates of the last three years



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CAREER OPTIONS

- Computer Scientist
- Software Developer
- Cybersecurity Specialist
- Network/Database Designer
- Technical Analyst
- Computer Animator
- Web Developer
- Data Analyst

Computer Science

CURRICULUM OVERVIEW

| YEAR 1 | YEAR 2 | YEAR 3 | YEAR 4 |
|------------------------------|--|---|---|
| Intro to Computer Science I | Discrete Structures | Operating Systems | Programming Languages |
| Intro to Computer Science II | Advanced Data Structures and Algorithm Analysis | Software Systems Development | Ethics in Computing |
| Biology I | Numerical Methods | Computer Science Elective | Computer Science Elective |
| Physical Science I | Computer Organization and Design | Computer Science Elective | Computer Science Concentration Elective |
| Physical Science I Lab | Object Oriented Design | Computer Science Concentration Elective | Computer Science Concentration Elective |
| Calculus I | Biology II or Physical Science II | Computer Science Concentration Elective | Computer Science Concentration Elective |
| Calculus II | Biology II or Physical Science II Lab | Technical Elective | Computer Science Approved Elective |
| General Ed: Humanities | Elementary Differential Equations and Linear Algebra | Technical Elective | Computer Science Approved Elective |
| General Ed: English Comp I | General Ed: English Comp II | Engineering Statistics | General Ed: Social Sciences |
| | General Ed: Humanities | General Ed: Social Sciences | General Ed: Arts |
| | Communication Studies | | |

LEGEND

Major-specific Engineering

Other Engineering

Science

Math

General Education