Located in the Thomas Maes Building Office 57, the Department of Computer Science is one of twelve units within the College of Arts and Sciences. Based on their personal and career goals, CS majors may select between one of two major degree tracks: the B.S. in Computer Science degree track or the B.S. in Computer Information Science degree track. The department likewise offers three academic minors (Computer Science, Computer Information Science, and Web Design), two academic concentrations (Game Development and Bioinformatics) and one certificate program (Game Design and Development).

About Computer Science
Every child in every classroom, every teacher in every school, and every person in every community is affected by technology, and the roots of technology were founded by innovative computer scientists. Skills mastered while studying computer science enable students to analyze, synthesize, and evaluate information, to articulate problems, and to develop solutions, thereby helping to prepare them for the competitive world in which they live.

Mission Statement
The department will offer an education that is highly regarded by students, colleagues, industry, and other universities for its quality in teaching and in pure and applied research. We recognize that computer science requires a solid foundation in fundamental principles in order to prepare our graduates for continued learning and adaptation to the increasingly rapid changes likely to occur in information technology. Our department prepares its students for professional employment and graduate education through study and implementation of the fundamental principles of theory, abstraction, and software design, while at the same time presenting the ethical and social issues associated with computer science. We believe that the work environment should enable everyone involved to feel a sense of confidence, power, and self-worth that will lead to the joyful pursuit of learning and effective teaching. This environment is best fostered when there is a climate of collegiality and collaboration among the department faculty and students. Integrity, honesty and trust are the foundation for success in any enterprise.

Program Educational Objectives
1. Graduates of the Undergraduate Program will develop the professional skills and the necessary technical knowledge both in breadth and in depth to prepare them for employment or advanced study in Computer Science.
2. Graduates of the Computer Science Program will have sufficient awareness of the local and global societal impact of technology and of the ethical issues in computer science to make decisions regarding their personal and professional responsibilities.
3. Graduates of the Computer Science Program will have the critical thinking, communication, teamwork, and leadership skills necessary to function productively and professionally.
4. Graduates of the Computer Science Program will demonstrate intellectual curiosity and the independent study skills necessary for life-long learning.

Our Students
Computer science develops students’ computational and critical thinking skills and shows them how to create, not simply use, new technologies. This fundamental knowledge is needed to prepare students for the 21st century, regardless of their ultimate field of study or occupation. Our students enrich their classroom and laboratory experiences by participating in professional and associated activities. These include the Lamar Chapter of Association of Computing Machinery (ACM), Upsilon Pi Epsilon (UPE) Honor Society, and League of Legends. Their activities include the ACM Spring banquet, ACM programming competition, ACM LAN parties, League of Legends parties, International Food Festival and more. Our department has a very good student to faculty ratio. The department also participates in the Cooperative Education Program, which allows qualifying students to alternate semesters of college study with on-the-job experience and training.

Degree Plans
B.S. in Computer Science
The Computer Science program at Lamar is a broad-based program emphasizing the areas of programming languages, data structures, information systems, theory and applications of computer science, software engineering, networking, database, multimedia, game design and development, computer architecture and graphics. The program requires the following: 17 hours in computer science, 15 hours in science, 17 hours in mathematics, 12 hours in laboratory science, 15 hours in academic courses, and an additional core curriculum course, for a bachelor’s degree. Students are required to take the ETS computer science field exam during the semester in which they are graduating and gain a minimum GPA of 2.0 or ACT scores, rank in class, extracurricular activities in school, and community service.

2. The Dr. William “Bill” Nylan Scholarship in Computer Science. This Scholarship awards about $450.00 each spring semester to an incoming or current academically promising student who has earned at least 15 university semester credit hours and is in the bachelor’s program in Computer Science or Computer Information Science.

3. The Bobby Waldron Memorial Scholarship in Computer Science. This scholarship awards about $350.00 each spring semester to incoming or, current academically promising student who has earned at least 30 university credit hours and is in the bachelor’s program in Computer Science or Computer Information Science, and who has completed the courses: Programming Fundamentals I and Programming Fundamentals II.

4. In addition, the Department offers two scholarships that are funded by the National Science Foundation:

   a. The ASCENT Program (http://dept.lamar.edu/stairstep). Lamar University’s STARSTEP program (2009-2014) is designed to increase the number of students receiving baccalaureate degrees in Computer Science at other four-year institutions. All students may participate and graduate with a Bachelor of Science degree. Students are required to take the ETS computer science field exam during the semester in which they are graduating and gain a minimum GPA of 2.0 or ACT scores, rank in class, extracurricular activities in school, and community service.

   b. The Crawford/Lewis Endowment Scholarship in Computer Science. This scholarship awards about $350.00 each spring semester to incoming, or current, academically promising student who has earned at least $350.00 each spring semester to incoming, or current, academically promising student who has earned at least 15 university semester credit hours and is in the bachelor’s program in Computer Science or Computer Information Science.

   c. The Bobby Waldron Memorial Scholarship in Computer Science. This Scholarship awards about $450.00 each spring semester to an incoming or current academically promising student who has earned at least 15 university semester credit hours and is in the bachelor’s program in Computer Science or Computer Information Science.

   d. The DR. WILLIAM “BILL” NYLAN SCHOLARSHIP IN COMPUTER SCIENCE. This Scholarship awards about $450.00 each spring semester to an incoming or current, academically promising student who has earned at least 15 university semester credit hours and is in the bachelor’s program in Computer Science or Computer Information Science.

   e. The Bobby Waldron Memorial Scholarship in Computer Science. This Scholarship awards about $350.00 each spring semester to incoming or, current, academically promising student who has earned at least 30 university credit hours and is in the bachelor’s program in Computer Science or Computer Information Science, and who has completed the courses: Programming Fundamentals I and Programming Fundamentals II.
The Certificate Program in Game Design and Development is designed to prepare professionals from various disciplines to serve software companies specialized in game design and development. The certificate program has the following five 3-credit hour requirements:

1. COSC 3306 – C++/Unix
2. COSC 2336 – Game Programming Fundamentals I
3. COSC 2372 – Game Programming Fundamentals II
4. COSC 4320 – Programming Mobile Devices
5. COSC 4332 – Programming Advanced Web Design

The minimum required grade is "C" or above and the total number of credit hours for this minor is 21.