



Academic Learning Compact

Computer Science BS

Program Mission Statement

The School of Computing is dedicated to the promotion of an academically exciting and progressive intellectual climate, characterized by a superior program of instruction, peer-recognized scholarship, effective support services, and productive professional community involvement. In particular, the School is committed to offering undergraduate and graduate degree programs observing national standards, maintaining and expanding course offerings to keep pace with the rapid development of computer theory and computer technology. In recognition of its leadership position in computing, the School supports the need for instruction in computing as required by other University programs and advocates faculty participation in collaborative computer-related projects involving other professionals or colleagues. The vitality of the School is enhanced by encouraging ongoing faculty research and development, ultimately serving the instructional mission of the School and providing both Northeast Florida and the nation with a wellspring of knowledge and wisdom in computing.

The Computer Science degree requires a strong background in mathematics and science, including calculus and calculus-based physics. It is recommended for those interested in the more technically and scientifically oriented areas of computing. It emphasizes course work in computational structures, systems software, data structures, artificial intelligence, algorithms, data modeling, modeling and simulation, computer graphics, compilers, operating systems, interfacing, computer architecture, robotics, and other applications and theory.

Student Learning Outcomes

Graduates will be able to:

Content/Discipline-Specific Knowledge/Skills

- Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions
- Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline
- Apply computer science theory and software development fundamentals to produce computing-based solutions

Communication Skills

- Communicate effectively in a variety of professional contexts
- Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline

Critical Thinking Skills

- Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles

Assessment Approaches

Student Learning Outcomes are categorized based on attainment of: 1) Content/Discipline-Specific Knowledge/Skills, 2) Communication Skills – Collaboration and Oral & Written Communications, and 3) Critical Thinking Skills. A number of direct and indirect assessment approaches will be employed to assess attainment of the outcomes.

Direct Assessments

Content/Discipline-Specific Knowledge/Skills

- CEN4010 - Software Engineering
- CIS3253 - Legal and Ethical Issues in Computing
- COT4400 - Design and Analysis of Algorithms
- COP4620 - Construction of Language Translators.

Communication Skills

- CEN4010 - Software Engineering – CATME evaluation tool (www.catme.org)
- CIS3253 - Legal and Ethical Issues in Computing
- Oral presentations completed in various courses.

Critical Thinking Skills

- CIS3253 - Legal and Ethical Issues in Computing.

Indirect Assessments

All three categories

- Graduating Senior Survey - 7 questions