MAJOR PROGRAMS
Graduates of the Computer Science **Comprehensive Major** will be able to:

1. Apply the foundational elements of mathematics, logic, critical thinking and problem-solving skills to develop the algorithms and data structures necessary to solve a wide variety of computing problems.
2. Analyze a problem, identify and define the computing requirements appropriate to its solution and demonstrate comprehension of the tradeoffs involved in design choices.
3. Design, implement, test and evaluate a computing system or component to meet desired needs.
4. Apply and use concepts from computer architecture, operating systems, and networking in computing system design, implementation and performance analysis.
5. Use and evaluate a wide variety of modern tools and languages used in the practical construction of computing systems.
6. Collaborate effectively in a team environment.
7. Recognize social, ethical, and legal issues that surround the production and use of technology.
8. Communicate effectively, both orally and in writing, to technical and non-technical audiences.
9. Recognize the rapidly evolving nature of computer science and engage in lifelong learning in the computing discipline.