# ICS 111 : Introduction to Computer Science I

Intended for computer science majors and all others interested in a first course in programming. An overview of the fundamentals of computer science emphasizing problem solving, algorithm development, implementation, and debugging/testing using an object-oriented programming language.

#### Credits 3

### Lecture Hours 3

## Prerequisites

MATH 103 with a grade of "C" or better, placement into MATH 135, or consent of instructor.

### **Course Outcomes**

- Use an appropriate programming environment to design, code, compile, run, and debug computer programs.
- Demonstrate basic problem solving skills: analyzing problems, modeling a problem as a system of objects, creating algorithms, and implementing models and algorithms in an object-oriented computing language.
- Illustrate basic programming concepts such as program flow and syntax of a high-level general purpose language and basic security practices.
- Demonstrate working with primitive data types, strings, and arrays.