Indiana University Kokomo

School of Sciences

Computer Science Program

2020 - 2025 Assessment Plan

I. Mission statement

The program strives to offer students excellent instruction and educational opportunities in Computer Science. It endeavors to provide its students with a durable technical foundation in an environment of rapid technical change and to enable and promote their professional growth through contact with best professional practice.

II. Student learning outcomes

We have grouped our learning outcomes based on these categories:

A. Problem-Solving
B. Professional Quality
C. Communication, Teamwork, and Diversity
D. Professionalism and Lifelong Learning

The Computer Science B.S. program will enable students to achieve the following list of learning outcomes grouped based on the categories listed above. By the time of graduation, the student should be able to do the following:

Goal A: Problem-solving
A1: Students will analyze and design a solution to a problem.
A2: Students will utilize a programming language to implement software/system.
A3: Students will test the program to ensure it solves a given problem and is free of errors.

Goal B: Professional Quality
B1: Students will develop software/system using at least one high-level programming language.
B2: Students will apply knowledge of data structures, algorithms, and databases while designing/developing a software/system.
B3: Students will understand the components and functions of computer hardware, architecture, and operating systems.
B4: Students will apply software engineering skills and development skills to solve real problems.

Goal C: Communication, Teamwork, and Diversity
C1: Students will communicate effectively through speaking, writing, and the use of presentation tools.
C2: Students will demonstrate the necessary interpersonal skills to work effectively in diverse and/or multi-disciplinary teams.

Goal D: Professionalism and Lifelong Learning
D1: Students will understand how technological advances impact society and the social, legal, ethical, and cultural ramifications of computer technology and its usage.
D2: Students will demonstrate a sense of exploration and develop skills that enable lifelong learning.