The bachelor's in computer science degree provides a pathway for MC students to pursue technical careers while participating in an academic program that has course flexibility appropriate for a third shift worker.

## **Program Overview**

University of Louisville's Bachelor of Arts in Computer Science degree provides a pathway for MC students to pursue technical careers in Kentucky while participating in an academic program that has course flexibility appropriate for a third shift worker. Graduates can pursue high demand careers that rely on computer science and broad knowledge in application areas. In addition, MC students have the opportunity to complete co-op requirements at UPS through the UPS IT Professionals Pathway to ensure continued eligibility of MC benefits throughout the degree program.

## **Course Offerings**

The program is designed to be eight semesters long with two co-ops (or internships) in between. The credit hours of the program cover the required thirty-one credit general education requirements, two hours earned from the co-ops (internships), a minimum of fifty-seven hours in the field of computer science and an additional minimum of thirty hours in other areas of study (excluding business). Allowing students to choose other areas of studies that are not necessarily tied to sciences or engineering will make this degree attractive to students with leanings towards fields in liberal arts and the desire to work in a technically savvy industry.

This degree should attract students directly from high schools, pre-engineering students, transfer students, and existing graduates with skills in other disciplines seeking to expand their knowledge and seek a future in a technical career. The program is also designed to leverage the expertise and infrastructure in existence in the Department of Computer Science and Engineering (CSE).

This program is designed to provide the students a solid foundation and hands-on skills in computer science while allowing them to develop additional skills in other areas such as liberal arts, humanities, education, or sciences, excluding business. This is consistent with the Speed School of Engineering's mission, that is to serve the University, the Commonwealth of Kentucky, and the engineering profession by providing high quality educational programs to all students. The BACS program is built on the rigorous computer science courses of the ABET-accredited BS CSE program, while allowing students with different interests to study a broad range of electives from both computer science and other areas of study. The BACS program, through different admission requirements, will allow the Speed School of Engineering to serve a large number of academically diverse student populations, fulfilling our mission to provide high quality educational programs to all students. This is also consistent with the UofL's mission of "teaching diverse undergraduate, graduate, and professional students in order to develop engaged citizens, leaders, and scholars". The BACS students will master techniques in programming, data structures, algorithm design, software systems, computer applications, database design and development, among others. They will be able to meet the technological needs of various industries such as manufacturing, health care, and various service sectors, and become engaged citizens and leaders in their fields. With the widespread use of computer technology in virtually all aspects of our society, there is an increasing need for more computer science graduates with skills in both computing and application areas, as well as a correspondent need for a diversified computing workforce. The BACS program can address both these societal needs by producing more BACS graduates among diverse student populations.

## Co-Op/Internship

Bachelor of Arts in Computer Science degree students will co-op for two summer terms. MC students will have an opportunity to complete the experiential learning component of the this program while maintaining MC benefits by participating in the UPS IT Professionals Program.