Robotics Programming Certificate

Program Description

This certificate is designed to provide additional training to supplement degree programs in other related areas. The curriculum combines aspects of engineering and computer science emphasizing design of physical robotic systems and the software necessary for intelligent control. The certificate introduces students to mechanical, electrical, software, and operational aspects of robotic systems. Students gain practical engineering and software development experience in laboratories and automation-type projects.

This program is a part of the Southern Polytechnic College of Engineering and Engineering Technology.

Admission, Enrollment, and Graduation Policies

Admission Requirements

This program does not have specific admission requirements and only admission to Kennesaw State University is required. For more information, please visit the Admissions section of the catalog.

<u>Graduation Requirements</u>

Each student is expected to meet the requirements outlined in the Academic Policies: 5.0 PROGRAM REQUIREMENTS & GRADUATION.

Program Course Requirements

Required Courses (15 Credit Hours)

- MTRE 3810: Device Control and Simulation of Mobile Robots
- MTRE 3810L: Device Control and Simulation of Mobile Robots Laboratory
- MTRE 4001: Modeling and Feedback Control of Dynamic Systems
- MTRE 4002L: Feedback Control Laboratory
- MTRE 4200: Robotics Analysis and Synthesis
- CS 3305: Data Structures

Electives (6 Credit Hours)

Select six credit hours from the following:

- CS 3642: Artificial Intelligence
- CS 4732: Machine Vision
- CS 4267: Machine Learning

Program Total (21 Credit Hours)