Physical Computing and the Internet of Things Certificate

This program roadmap represents one possible pathway to complete the program. Please see a counselor to create an education plan that is customized to meet your needs. This roadmap is not a guarantee of course availability or financial aid applicability. For counseling appointments call 916.608.6510.

Total Units: 6

First Year

Semester 1 — 6 Units

COURSE	UNITS	PRE-REQS^	SEMESTERS OFFERED*
MAKR 100 Introduction to Microcontrollers and Physical Computing	3		
MAKR 101 The Internet of Things	3		

Notes

- Physical Computing and the Internet of Things (IoT) are terms used to describe the internetworking of physical devices, vehicles, buildings and other items embedded with electronics, software, sensors, actuators, and network connectivity that enable these objects to collect and exchange data. Examples of physical computing and IoT devices include home automation systems, remote monitoring solutions, and "smart" devices of all kinds.

- Upon completing this hands-on certificate, students will have a solid foundation in physical computing and IoT techniques and technologies, including evaluating devices and services, the use of microcontrollers, developing and modifying programming code, using sensors to record and evaluate environmental data, and employing various kinds of actuators to respond to user and environmental inputs.

Zero Textbook Costs (ZTC):

The Zero Textbook Costs designation and logo are added to any course that provides free access to all required instructional materials. These are typically shared with students through Canvas. Courses that are designated as ZTC may still require students to purchase supplemental materials such as lab coats, a calculator, art supplies, etc. See full definitions and searching tips on the Zero Textbook Costs page of the college website.