Embedded Computing & Robotics I & II
Prerequisites: CS 111x and DLD

What is this new embedded computing course sequence I’ve been hearing about?
An embedded computer is the “brain” that makes a “smart system” smart. ECE is developing two new courses in embedded computing & robotics that will use the TI Robotic Systems Learning Kit as a hardware platform. The new course sequence will cover topics in embedded computing with a focus on robotics and is independent of the FUN sequence. The prerequisites to the new sequence are CS 111x and DLD (Digital Logic Design, ECE 2330) and the classes are open to all majors.

The new course sequence was piloted in 2019-2020 with the first course (Embedded Computing and Robotics I) offered in both fall and spring and the second (Embedded Computing and Robotics II) offered in the spring. The hope is to offer both classes each semester after that. Each class will include extensive in-class hands-on material.

How can I learn more about the topics that will be covered?
If you visit the TI page which describes the robot system (university.TI.com/Programs/RSLK) you can investigate the curriculum. You can also view the construction guide and see how you will build the robot. We are revising the course materials in summer 2020 but the topics will be the same.

How do these courses fit in the CpE curriculum?
The first course in the sequence is 3 credits and counts as an ECE/CS elective in the CpE curriculum; it is cross listed as ECE/CS 3501. The second, ECE 3501, is 4 credits and counts as a replacement for ECE 3430. You cannot take both ECE 3430 and the new sequence.