

ECE431 Micro-controllers

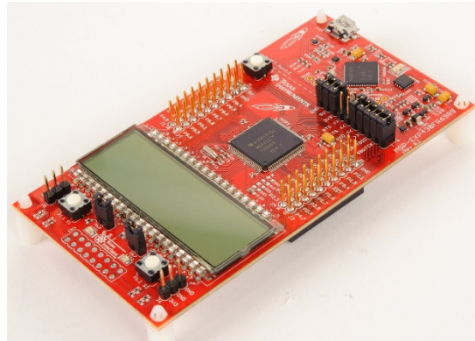
DESCRIPTION: Microcontroller architecture, assembly language programming and C- language programming, serial and parallel input/output application, timer operation, interrupt processing, component interfacing, programming techniques. Two hours of lecture, one hour of exams (some weeks), and three hours of laboratory per week. Pr.: ECE 241 and CIS 200 or 209.

TEXT: Texas Instruments, Inc. MSP430FR6989 LaunchPad™ Development Kit User's Guide (All in the Canvas)

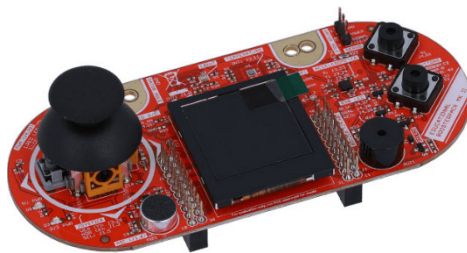
Rather than a textbook, you will need to buy a lab kit.

Hands-on Lab: We have upgraded our platform to MSP430. Therefore, please order the following 2 boards from TI or other distributors. The first lab section will be in the second week of the semester. So please get the boards (at least the board #1) before that. The 2nd boosterpack board will be used in Lab 9, Lab 10 and the final project.

#1. MSP430FR6989 LaunchPad Development Kit (<https://www.ti.com/tool/MSP-EXP430FR6989>)



#2. Educational BoosterPack MKII (<https://www.ti.com/tool/BOOSTXL-EDUMKII>)



Internet-of-Things Security

TBD