

**Mechanical Engineering and Mechanics
Drexel University**

MEM639 Real-Time Microcomputer Control I

Classroom: Undergraduate Lab (UG Lab)
Class Hours: Fall Quarter 18:00-21:00 Monday

Homepage: <http://www.mem.drexel.edu/pauloh.html>

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Recommended Text: Drexel MEM has a comprehensive LabVIEW license; if you are using department computers, then you have access to LabVIEW. If you wish to use your personal computer, then you can get a student version of LabVIEW. Some possibilities include:

1.	LabVIEW 7 Express Student Edition	ISBN: 0131239260	Book and CD
2.	Learning with LabVIEW 7 Express	ISBN: 0131176056	Book Only
3.	Learning with LabVIEW 8	ISBN: 0132390256	Book Only
4.	LabVIEW 8 Student Edition	ISBN: 0131999184	Book and CD

The ISBN numbers were found on Amazon.com. I have only tried 1 and 2. While we'll be using LabVIEW 8 in the course, versions 7.x should work fine. All the books above, are by Robert Bishop and published through a partnership between National Instruments and Prentice-Hall.

Prerequisites: Dynamics, ordinary differential equations, (continuous-time) control systems, and programming course (preferably LabVIEW), basic electronics

Course Outline: Graduate-level control systems course

Overview: Students will buttress classroom theory with hands-on circuit building and programming, to gain firsthand experience in controlling real-world systems with a computer.