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](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:  

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

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.