

First Tentative Meeting August 24, 2010**Instructor:**

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Text :

Digital Control Engineering: Analysis and Design (ISBN 13: 978-0-12-374498-2)
M. Sami Fadali and Antonio Visioli

Software:

Mostly MATLAB, and Altera's Quartus and NIOSII Software Build Tools.

Class Schedule:

Tr 9:00-10:15 A.M., Workman 117. **(First class)**

Office Hours:

Mon - Fri 9:00 - 10:00 A.M. WORKC 209.

Prerequisites

Have completed EE 308, EE 341, EE 443 or equivalent, or consent of instructor; senior or graduate status.

Course Overview:

This course is intended for advanced engineering students interested in the application of control systems. The course will provide an overview of control analysis and design, hardware and software. A specific platform will be chosen for class projects.

Grading:

- Homework: 20%
- Class participation: 20%
- Mid-term project: 20%
- Final presentation and project: 40%

Topics:

- Introduction to digital control
- Discrete-time systems
- Modeling of digital control systems
- Stability of digital control systems
- Analog and digital control system design
- Hardware and software of an embedded system (using Altera DE0 or DE1 development boards).