Course Outline
SE 420: Digital Control Systems
Term: Fall 2022

Instructor: Dušan M. Stipanović
Lectures: Tuesdays and Thursdays 8.00-9:20am in 203 Transportation Building and via Canvas
Office hours: Tuesdays 9:20am-10:20am in 312 TB and via Zoom
(https://illinois.zoom.us/j/85854878764?pwd=b0dMOExheVdpN2o0SEdGU3NvdnFhUT09,
Meeting ID: 858 5487 8764, Password: 721468) or phone
Email: dusan@illinois.edu
Phone: 217-244-0907
Course material: Canvas (https://canvas.illinois.edu)

Lab Instructor: Daniel J. Block
Email: d-block@illinois.edu
Lab location and hours: 3075 ECE Building, MW 3:00-5:50pm
Website: http://coecsl.ece.illinois.edu/ge420

Teaching Assistant: Josh Love
Email: jelove2@illinois.edu

Text: *Lecture Notes* partially based on ***Digital Control of Dynamic Systems***, Third Edition, G. F. Franklin, D. J. Powell, and M. L. Workman, Addison-Wesley, 1998. Pdf of the lecture notes is available and can be downloaded from Canvas (https://canvas.illinois.edu).

Topics:
- Introductory Digital Control
- Discrete Systems Analysis
- Sampled-Data Systems
- Discrete Equivalents
- Design Using Transform Techniques
- Design Using State-Space Methods
- Discrete-Time Systems: Special Topics

Grade composition (subject to changes):
- One midterm exam on Thursday 10/13/2021, 15%.
- Final exam: 30%.
- Homework problems: 35%.
- Lab assignments: 20%.

Fall 2016 lectures' video recordings: available via Canvas

General information: Late assignment submissions will not be accepted, in general.