ME 4232: FLUID POWER CONTROLS LAB

Class #12
Internal Model Control & Adaptive Control
Notes

• Upcoming Labs:
  – Lab 20: Internal Model Control
  – Lab 21: Adaptive Control
    • No Report Due

• Upcoming Classes: (Attendance Expected)
  – April 25: Paul Carroll, MTS Systems & Force Control
  – May 2: Mike Olson, Eaton Corp. & Course Review I
  – May 9: Course Review II
  – May 16: Final Exam 1:30 pm – 3:30 pm

• Career Opportunity: Danfoss Power Solutions (Ames, IA)
  – Advanced Systems Engineer, NVH Engineer, Product Engineer,
    Product Application Engineer

• No Office Hours Tuesday
Agenda

• Internal Model Control – a.k.a. how to track a sine wave…
  – General Approach
  – Transfer Function
  – Pole Placement

• Adaptive Control
  – Challenges of Feedforward Control
  – Adaptive Algorithm
  – Examine Why it Works

• Force Control Introduction