Computer Engineering Undergraduate Curriculum Updates

Electrical and Computer Engineering Information Session
October, 2020
Aims of the Updates

- Increase the number of credit hours on computer engineering
- Decrease the number of credit hours on electrical engineering (circuits)
- Offer courses with programming and computer lab components earlier
- Shorten the gap between dependent courses
- Help students to better adapt to advanced study and/or industry
Overview of the Changes

• CSE 2 (2) is replaced by CSE 7 (or 3+4)
  – CSE 7 (4) or CSE 3 (2) + CSE 4 (2)
  – Have taken CSE 2: take CSE 17 next and 5 ATEs (old program)

• ECE 138 Digital System Lab (2) is replaced by
  – ECE 132 Microcontroller Lab (3) and
  – ECE 128 FPGA Lab (3)

• ECE 182 (1) and ECE 121 (2) no longer required
  – Can count toward technical electives under the new program

• ECE 319 (3) no longer required
  – It will be offered every Fall and counts toward technical electives
Comparison between OLD and NEW Course Sequence

OLD

NEW

Indicates a course that is offered both semesters
Implementation Timeline

- **Spring 2021**: start to offer ECE 132 and stop offering ECE 138
- **Fall 2021**: start to offer ECE 128
- **Spring 2022**: add RTL projects to ECE 201 and change prerequisite to ECE 128
Class 2021 (Senior) and Before

• Use OLD curriculum
• If not taken ECE 138 yet, take ECE 128 instead and substitute through petition
Class 2022 (Junior)

- Can choose either OLD or NEW (recommended) program
- If choose NEW
  - Add ECE 132 to the NEW JR 2
  - Add ECE 128 to the NEW SR 1
- If taken ECE 138 already, can substitute ECE 128 through petition
Class 2022 (Junior) Continued

- If choose OLD
  - Need to petition to follow OLD requirement
  - ECE 319, ECE 121, ECE 182 are still required
  - If not taken ECE 138
- Take ECE 128 to substitute through petition
Class 2023 (Sophomore)

- Use NEW curriculum

NEW

Prerequisite

Co-requisite

Indicates a course that is offered both semesters
# Transition Period Summary

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