

# ECE Curriculum Committee Meeting

## Tuesday, April 29<sup>th</sup>, 2025

**Attending:** Arabshahi, Bushnell, Chen, Dela Cruz, Huberman, Kaushansky, Kirschen, Lim, Reyes, Rudell, Shepard, Swanson, Van Fossen

**Absent:** Fazel, Hauck, Majumdar, Moritz

### Agenda:

1. Revised Integrated Systems courses and added joined grad courses

### Revised Integrated Systems Courses and Added Joined Grad Courses

Professor Chris Rudell brought to the committee a proposed revision of the Integrated Systems (IS) course track to restructure the order and focus of learning topics and to incorporate a proposed Tapeout course that could act as a capstone across two quarters. These revisions are in response to an increasing demand for education that teaches students how to design physical chips and to teach foundational knowledge earlier so once students reach their fourth year, they would be able to handle projects that consist of designing and manufacturing chips.

- Presentation Slides - [Link](#)
- IS courses have received sponsorship backing from companies such as Apple to fund the creations of chips from Tapeout courses
- Challenges of current IS track – see slide 4 of presentations
  - The current curriculum has a mixed focus of digital domains and analog interfaces; would like to put a reinvestigate analog pathway
  - As pathway stands, students are not exposed to transistors until junior year; restructuring timeline of courses would allow students to have full exposure of necessary content prior to the Tapeout courses
- Proposed IS course track change will not only expose students to foundational material sooner but would lessen the dependencies between courses.
  - See slide 5-6 for changes
- Kirschen expressed a concern that if there are graduate level courses parallel to the proposed 400 level Tapeout courses, there will need to be clearly defined differences of how undergraduate and graduate students will be graded.
- Van Fossen expressed a concern with the changes in the prerequisites in that if courses are not listed as required some students may not take them
  - As noted by Rudell, the prerequisites should be EE 332 and EE 333 for higher level IS courses

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- Having these courses done in time could be challenging for transfer and DTC students trying to complete the pathway
- **The committee will discuss this subject further in future meetings**
  - **Rudell will review proposal and decide if EE 361 will be a prerequisite or a recommended course as well as where it will fit in the sequence**
  - **Rudell will provide Master Course Descriptions for IS courses to May Lim and will prepare syllabi to present to committee**