

Division of Electrical and Computer Engineering

New Curricula for 2013-2014

Presentation to students October 12, 2004

Rationale Behind Changes

- Students wanted more flexibility in choosing junior level courses
- Students wanted a freshman introduction to ECE
- Students wanted a course teaching Matlab, PSPICE and printed circuit board CAD
- One or more of these things already exist in many strong ECE programs

What are the major changes common to both EE and EEC?

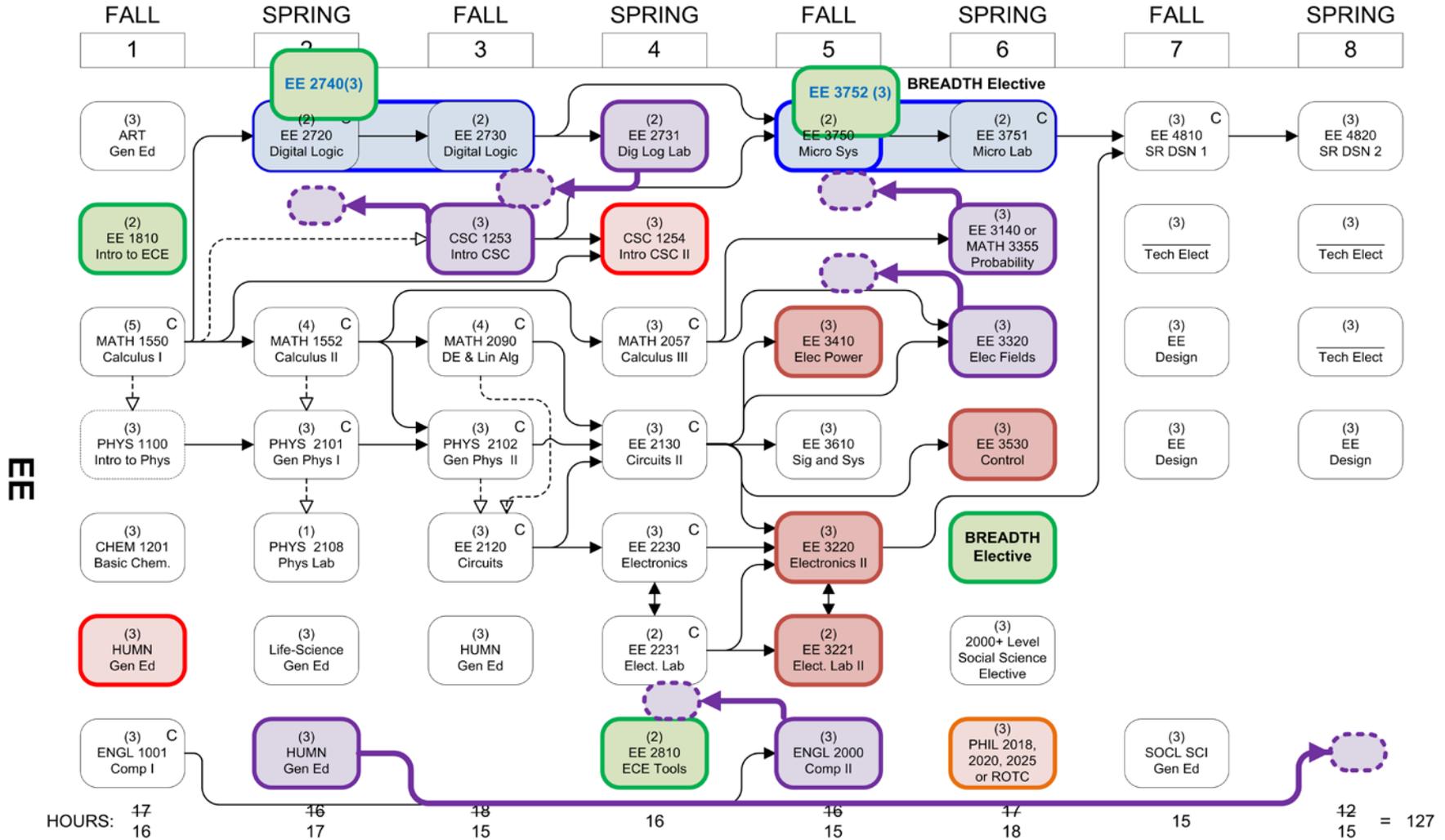
- Added EE 1810 - Intro to ECE
- Added EE 2810 – Computer Tools in ECE
- No longer require EE 3220 and 3221
- Combined EE 2720 and 2730 into a new 3 credit course: EE 2740
- Combined EE 3750 and 3751 into a new 3 credit course: EE 3752
- Only allow PHIL 2020 and drop 1 Humanity requirement

What are the major changes to EE?

- Dropped requirements of CSC 1254, EE 3220, 3221, 3410, 3530, 3752 (old 3750 and 3751)
- Added the Breadth Elective – 18 hours of courses selected by students from a list of 3000 level courses with EE rubric

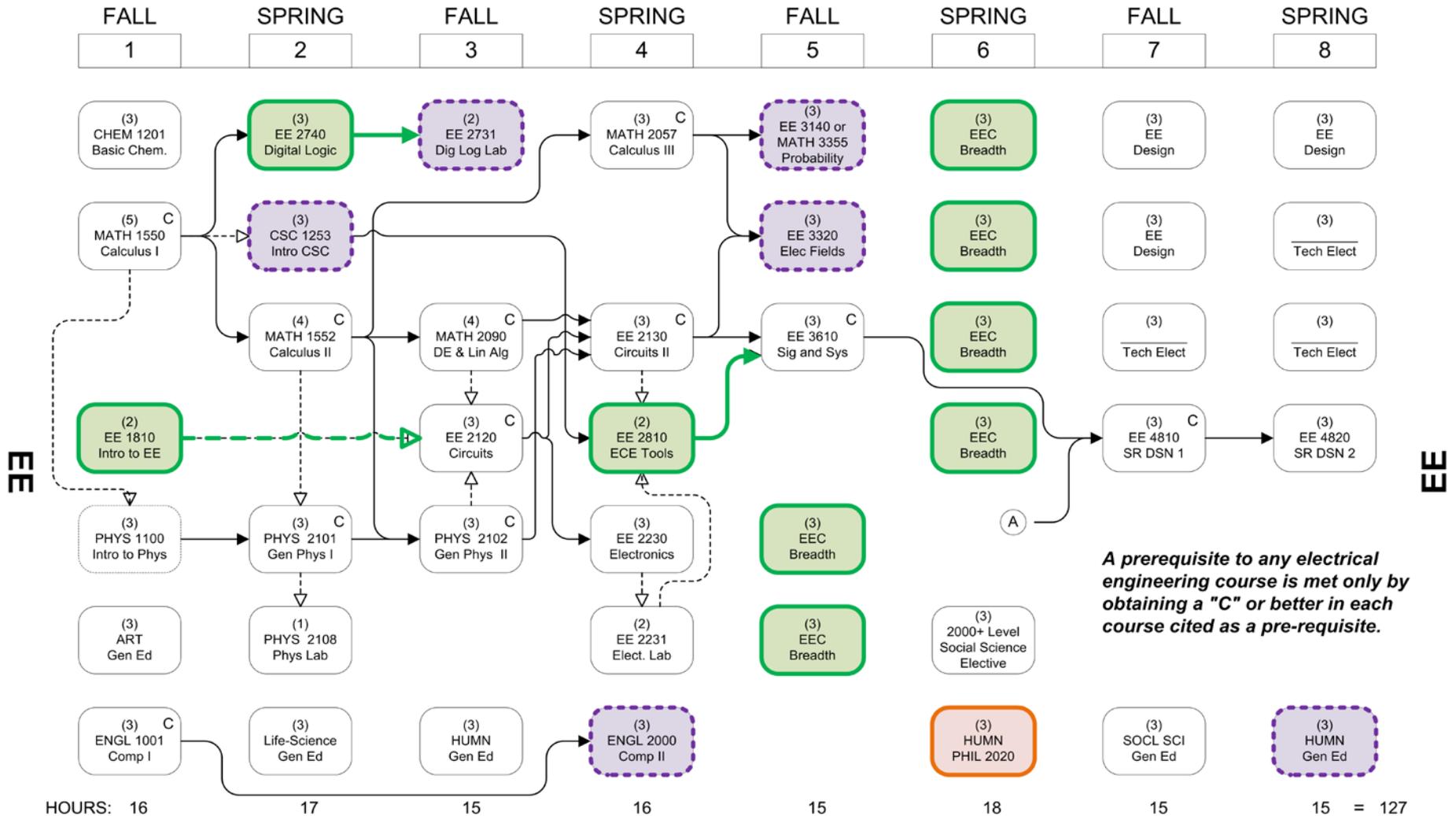
What are the major changes to EEC?

- Added EE 3710 – Communications in Computing (required, formerly EE 4710)
- Added EE 4755 – Hardware Description Language (required, new course)
- Dropped requirement of 4750
- Added a Breadth Elective – choose 1 course from a list of 3000 level courses with EE rubric



FLOWCHART LEGEND

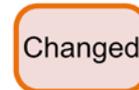
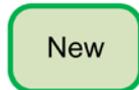




A prerequisite to any electrical engineering course is met only by obtaining a "C" or better in each course cited as a pre-requisite.

FLOWCHART LEGEND

- Credit required
- - - - -> Credit or registration required
- ↔ General Education - See 2013-2014 General Catalog



EE Breadth: Students must choose at least 18 hours of Breadth Electives. At least 9 hours must be chosen from courses marked with *. Breadth Electives include: 3160*, 3220*, 3221(2), 3232, 3410*, 3530*, 3752*, 3755

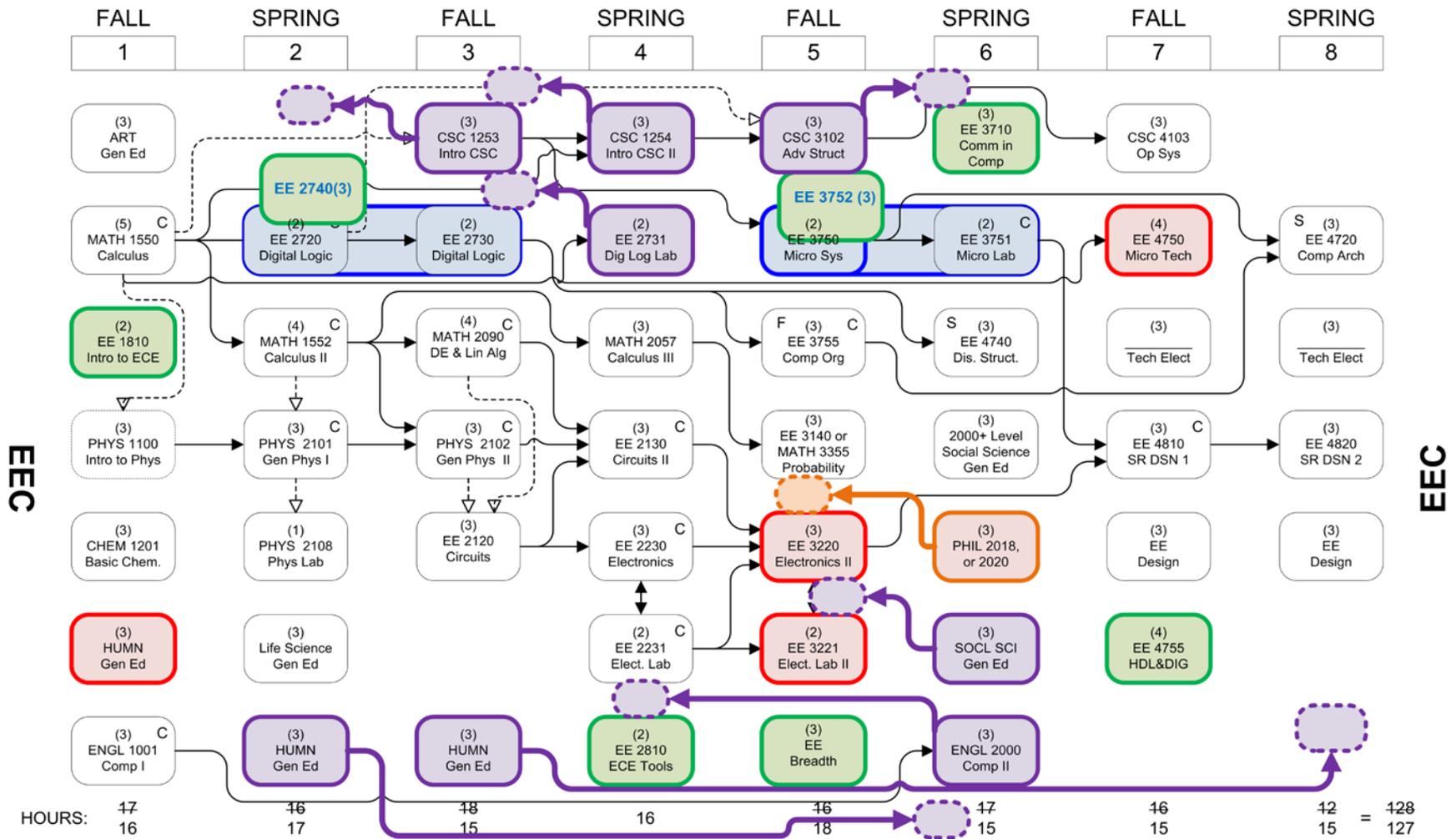
(A) In addition to EE 3610, the prerequisite is senior standing and one of 3160, 3220, 3410, 3530, or 3755

EE Breadth

- Students must choose at least 18 hours from this list, and 9 hours must be chosen from courses marked with *.

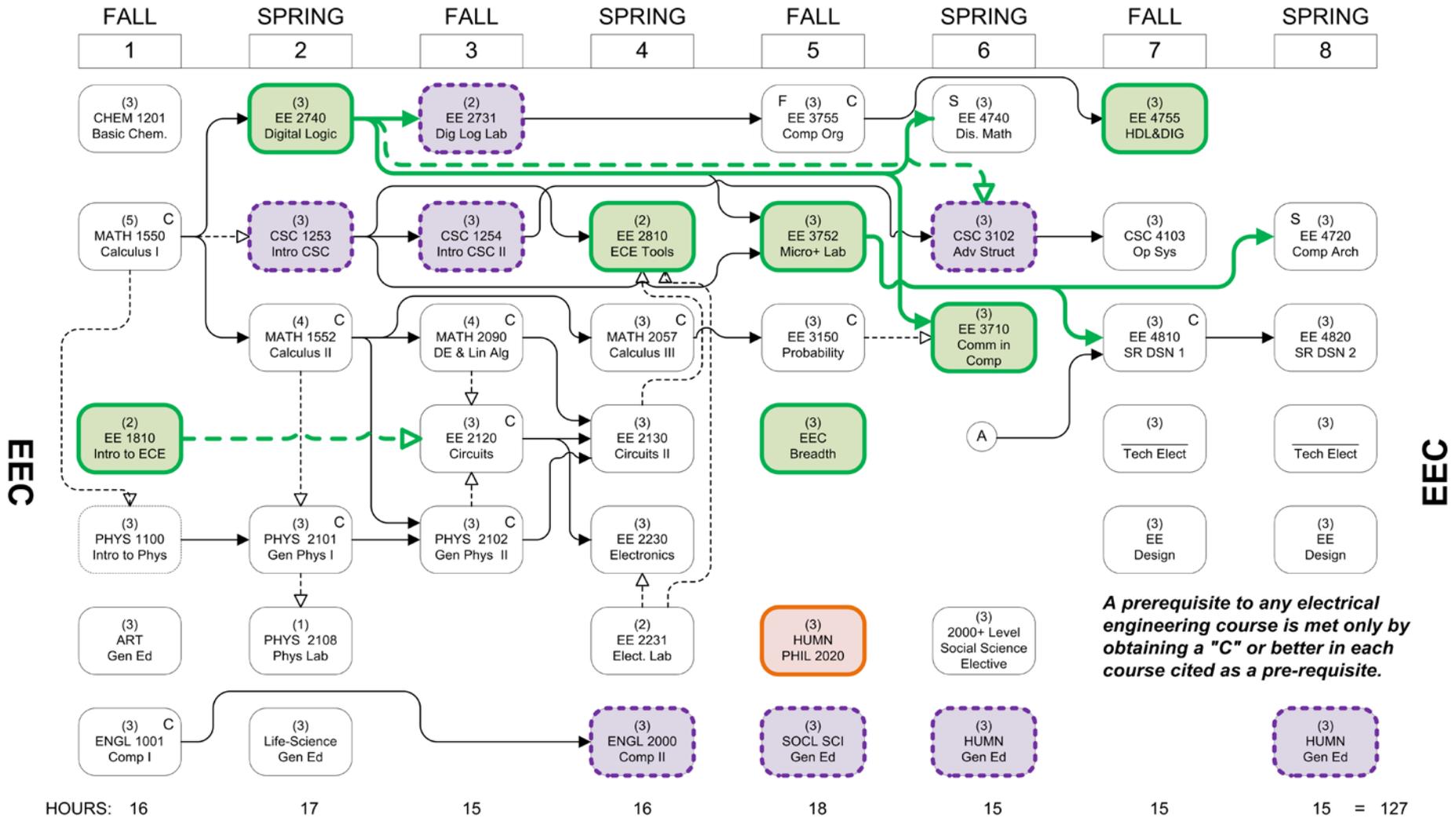
EE 3160*, 3220*, 3221(2), 3232, 3410*, 3530*, 3752*, 3755

COMPUTER ENGINEERING



FLOWCHART LEGEND





EEC

EEC

A prerequisite to any electrical engineering course is met only by obtaining a "C" or better in each course cited as a pre-requisite.

FLOWCHART LEGEND

- Credit required
- Credit or registration required
- Co-registration required
- General Education – See 2013-2014 General Catalog

New

Moved

Changed

EEC Breadth (3), Select from: 3160 (3), 3220 (3), 3320 (3), 3410 (3), 3530 (3), 3610 (3)

(A) In addition to EE 3752, the prerequisite is senior standing and one of 3160, 3220, 3410, 3530, or 3755

EEC Breadth

- Students select 1 course from this list:
- 3160, 3220, 3320, 3410, 3530, 3610

What does this mean?

- Retention in ECE should improve after the freshman year.
- Students will be more prepared to take courses requiring the use of Matlab, PSpice and PCB design
- Students will have more flexibility when choosing their areas of interest in ECE.

Should you switch?

- Students can choose to move to a more recent catalog year from their current.
- Changing to the 2013-1014 flowchart would mean significant changes to requirements.
- Articulation tables will help with the switch - similar to transfer student articulation.
- Students should meet with the undergraduate advisor prior to making the switch.

Other important considerations

- If you have credit in 2 humanities and credit for either PHIL 2018,2025 or 3 ROTC credits, you WILL NOT need to take PHIL 2020. You can just take another humanity elective.
- GenEd electives:
 - In 2011 some humanities were moved to social sciences
 - First year of foreign language now counts as HUM

If you switch...

- EE 2810 will be required for EVERY student who switches to the new catalog year. **No substitutions for EE 2810 will be made.**
- EE 2810 may be offered in Spring 2013
- No current students will take EE 1810, other substitutions will be allowed.

If you switch...

- Were you planning to enroll in **EE 2720** in the spring 2013?
 - What if **EE 2740** was offered instead?
- Were you planning to enroll in EE 3750 in the spring 2013?
 - 3751 may be offered the last time in Fall 2013
- Any student enrolled in 3750 this semester should probably not switch to the new flowchart.

If you DON'T Switch...

- Eventually, classes from the old flowcharts will be dropped.
- New classes will replace these classes. If a student does not switch to the new flowchart, some may be forced to take new classes to meet old requirements.
- Hopefully all of you graduate before this happens – or switch

If you DON'T Switch...

- Here are some acceptable substitutions:
 - EE 3752 (3) = EE 3750 (2) + EE 3751 (1)
 - EE 2740 (3) = EE 2730 (2) + EE 2720 (1)
 - EE 2810 (2) = EE 3751(1) + EE 2720(1)
 - EE 3710 (3) = technical elective for EEC and EE
 - EE 4750 (3) = 3 credits of 4750, leaving them 1 credit short of the necessary 128. I would encourage a student in this case to switch to the new flowchart. EE 4750 can count for a design course.