

The New EECS Curriculum: Highlights

-
- **Two new required 12-unit *Introductory* EECS subjects: 6.01, followed by 6.02**
 - In these hands-on subjects, students learn how interwoven EE and CS are in applications (e.g., mobile robots, communication networks)
 - Enable more informed choices of future subjects
 - Together satisfy the Institute Laboratory requirement (6 units each)
 - Have already been offered a few times in pilot mode (6.081 and 6.082)
-
- **Three new 12-unit sophomore-level *Foundation* subjects**
 - **6.005:** Principles of Software Development (prereqs: 6.01, 6.042; alternatively for 2007-'08 academic year: 6.001, 6.042) (italics=coreq)
 - **6.006:** Introduction to Algorithms (prereqs: 6.01, 6.042; alternatively for 2007-'08: 6.001 and some Python self-study, 6.042)
 - **6.007:** Applied Electromagnetics: From Motors to Lasers (prereqs: 6.01, 18.03; alternatively for 2007-'08: 8.02, 18.03)
 - All three being launched in pilot mode in Fall 2007
 - **Revisions of existing *Foundation* subjects for 2008-'09 academic year**
 - **6.002, 6.003, 6.004** will drop to 12 units
 - 6.001 will perhaps transition to less-frequently-offered 12-unit elective subject (but not required in the new curriculum); some of the current content and style will continue on in 6.01, 6.005 and elsewhere
 - **For 6-1 (EE) degree, three EE *Foundation* subjects (from 6.002, 6.003, 6.004, 6.007)**
 - **For 6-3 (CS) degree, three CS *Foundation* subjects (namely 6.004, 6.005, 6.006)**
 - **For 6-2 (EECS) degree, four *Foundation* subjects -- two from EE, two from CS**
-
- **For 6-1 (EE), three EE *Headers* (from 6.011, 6.012, 6.013, 6.021) and one *Laboratory***
 - **For 6-3 (CS), three CS *Headers* (6.033, 6.034, 6.046) and 6.170 *Laboratory***
 - **For 6-2 (EECS), three *Headers* (at least one from EE, at least one from CS)**
 - **Revisions of some existing *Header* and *Laboratory* subjects for 2008-'09 academic year: 6.013, 6.046, 6.034, 6.170**
-
- **Two required *Advanced Undergraduate* subjects**
 - Typically senior-level subjects/labs with at least one Header-level prerequisite; list of approved subjects to be developed over coming year
 - The sequences that lead to these subjects in effect define concentration streams
-
- **Two required *Math* subjects**
 - 18.03 (required for 6-1 program) or 18.06
 - 6.041 (required for 6-1 program) or 6.042 (now a REST subject, and required for 6-3 program)
 - This automatically satisfies the Institute REST requirement

Transition Plan

Mandatory for Class of 2011 (freshmen entering Fall 2007)

Optional for Class of 2010

- **You can continue with the present curriculum** instead of switching to the new one. All currently listed prereqs still apply for current subjects, even those that appear in new curriculum with new prereqs. [If you have already invested in taking 6.001 and are aimed at the 6-1 program (EE), this may be your better option, unless you are willing to just use 6.001 as an unrestricted elective and switch to the new curriculum. Consult the Undergraduate Office and/or an EECS undergraduate advisor.] You will still be able to take advantage of courses being introduced for the new curriculum, through the following possible substitutions in your SB program (available to undergraduates from earlier Classes too):
 - 6.01 or 6.02 (or their respective predecessors 6.081, 6.082) as a department lab (or both together as an Institute Lab) or as an unrestricted “x” elective
 - 6.01 + 3-unit Scheme supplement (6.188) instead of 6.001
 - 6.005 + 3-unit IAP software lab supplement instead of 6.170
 - 6.006 instead of 6.046 (with 6.046 available as engineering concentration subject)
 - 6.007 instead of 6.013 (with 6.013 available as engineering concentration subject)
 - 12-unit versions of 6.002, 6.003, 6.004 (when they become available, after next academic year) instead of the 15-unit versions

- **You can switch to the new curriculum**
 - If you have not yet taken 6.001, then switching to the new curriculum may be most appropriate
 - Continue on to 6.01, provided you have some prior exposure to programming (high school, or an IAP programming class - otherwise consider taking 6.00 first)
 - If you will have completed 6.001 by the end of this term, you can use it instead of 6.005 as a Foundation subject in the new curriculum. [This is advantageous only to students aimed at the new 6-2 (EECS) or 6-3 (CS) programs, because 6-1 (EE) students don't need 6.005.] In this case, if you want/need to do 6.170 as your laboratory subject, you can then either take the current 15-unit version of 6.170 prior to its changing for the 2008-'09 academic year, or take 6.005 with a 3-unit software lab supplement
 - If you will have completed 6.01 (6.081) or 6.02 (6.082) by the end of this term, switching to the new curriculum may be the natural and advantageous thing to do
 - Note relaxed prereqs in 2007-'08 for new Foundation subjects