

Table A.2
ECE and Computer Science (COMPSCI) Double Major

First Year	
Fall Semester	Spring Semester
EGR 103L (53L) Computational Methods in Engineering	ECE 110L (27L) Fundamentals of ECE
Math 111L (31L) Introductory Calculus I	Math 112L (32L) Introductory Calculus II
Chem 101DL (31L) Core Concepts in Chemistry ¹	Physics 151L (61L) Introductory Mechanics ²
Writing 101(20) / Social Science or Humanities Elective 1	Social Science or Humanities Elective 1 / Writing 101(20)
Sophomore Year	
Fall Semester	Spring Semester
ECE 280L (54L) Signals and Systems	ECE 230L (51L) Microelectronic Devices and Circuits
COMPSCI 201 (100) Data Structures and Algorithms	ECE 250L Computer Architecture
Math 212 (103) Multivariable Calculus	Math 216 (107) Linear Algebra & Differential Equations
Physics 152L (62L) Intro Electricity, Magnetism, Optics ²	Biology Elective ³
Social Science or Humanities Elective 2	Social Science or Humanities Elective 3
Junior Year	
Fall Semester	Spring Semester
ECE 270L (53L) Electromagnetic Fields	ECE 350L Digital Systems
COMPSCI 310 (110) Operating Systems	COMPSCI 308 (108) Software Design & Implementation
Math 353 (108) Ordinary & Partial Differential Equations	Statistics Elective ⁴
Social Science or Humanities Elective 4	ECE Concentration Elective ⁵
Senior Year	
Fall Semester	Spring Semester
ECE Elective 1 ⁶ or ECE Digital Systems Elective ⁷	ECE Elective 1 or ECE Digital Systems Elective
ECE Elective 2 or ECE/COMPSCI Design Elective ⁸	ECE Elective 2 or ECE/COMPSCI Design Elective
COMPSCI 330 (130) Design & Analysis of Algorithms ⁹	COMPSCI Elective ¹⁰
Social Science or Humanities Elective 5	Free Elective

1. AP credit for Chem 20(18) or 21(19) is also acceptable.
2. See also the Physics requirements on [p.5](#).
3. Biology Elective selected from the list of approved Biology electives, found in [Appendix D](#).
4. Statistics Elective selected from the list of approved Statistics electives, found in [Appendix D](#).
5. ECE Concentration Elective: One course selected from the set of approved ECE Concentration Electives *from outside the Computer Engineering and Digital Systems area*. See [Appendix C](#) for a complete course listing. For the double major, the four-course ECE Concentration requirement is satisfied by taking this one non-Digital Systems ECE Concentration elective in addition to three other courses built into the double major: ECE 350L, COMPSCI 310 (110), and an ECE Digital Systems Elective.
6. ECE Elective: Any ECE course at the 300(100) level or above.
7. ECE Digital Systems Elective: One course from the Digital Systems area in the list of Approved ECE Concentration Area electives (see [Appendix C](#)).
8. Approved ECE/COMPSCI Design Elective: Approved ECE/COMPSCI Design Elective taken after meeting all Math, Science, and ECE Core curriculum requirements. In addition, each approved design elective has one or more pre-requisite upper-level ECE courses. The elected design course may not simultaneously also count as an ECE Concentration Elective or ECE Elective. See [Appendix D](#) for a list of all currently approved Design courses.
9. Students who matriculated prior to Fall 2013 may substitute COMPSCI 334(140) or 220(150) for 330(130)
10. COMPSCI Elective: Any COMPSCI elective at the 200 level or above.