

**Comparison of Computer Science, Computer Science and Engineering, Computer Engineering, and Electrical Engineering
Majors (2018-2019 catalog)**

Computer Science	Computer Science & Engineering	Computer Engineering	Electrical Engineering with computer engineering track
COM SCI 1 COM SCI 31	COM SCI 1 COM SCI 31	COM SCI 1 or EC ENGR 1 COM SCI 31	COM SCI 31
COM SCI 32 COM SCI 33 COM SCI 35L COM SCI M51A (EC ENGR M16)	COM SCI 32 COM SCI 33 COM SCI 35L COM SCI M51A (EC ENGR M16) EC ENGR 3 MATH 31A MATH 31B MATH 32A MATH 32B MATH 33A MATH 33B MATH 61 PHYSICS 1A PHYSICS 1B PHYSICS 1C PHYSICS 4AL or PHYSICS 4BL	COM SCI 32 COM SCI 33 COM SCI 35L COM SCI M51A (EC ENGR M16) EC ENGR 3 MATH 31A MATH 31B MATH 32A MATH 32B MATH 33A MATH 33B MATH 61 PHYSICS 1A PHYSICS 1B PHYSICS 1C PHYSICS 1B PHYSICS 1C PHYSICS 4AL or PHYSICS 4BL ENGR 96C	COM SCI 32 COM SCI 33 ⁴ COM SCI 35L ⁴ COM SCI M51A (EC ENGR M16) EC ENGR* 2 ECENGR 3 EC ENGR 10 EC ENGR11L MATH 31A MATH 31B MATH 32A MATH 32B MATH 33A MATH 33B PHYSICS 1A PHYSICS 1B PHYSICS 1C PHYSICS 4AL PHYSICS 4BL CHEM 20A
COM SCI 111 COM SCI 118 COM SCI 131 COM SCI M151B (EC ENGR M116C) COM SCI M152A (EC ENGR M116L) COM SCI 180 COM SCI 181 EC ENGR 131A or equivalent ¹ 20 units COM SCI electives ³ 12 units TBA electives 12 units Sci-Tech electives ⁵ COM SCI 130 or 152B (4 unit capstone)	COM SCI 111 COM SCI 118 COM SCI 131 COM SCI M151B (EC ENGR M116C) COM SCI M152A (EC ENGR M116L) COM SCI 180 COM SCI 181 EC ENGR 100 EC ENGR 102 EC ENGR115C EC ENGR 131A or equivalent ¹ 12 units COM SCI electives ³ 4 units EC ENGR electives ² 12 units TBA electives COM SCI M152B (4 unit capstone)	COM SCI 111 COM SCI 118 or EC ENGR 132B COM SCI M151B (EC ENGR M116C) COM SCI M152A (EC ENGR M116L) COM SCI 180 EC ENGR 100 EC ENGR 102 EC ENGR113 EC ENGR115C EC ENGR 131A or equivalent ¹ 8 units COM SCI electives 8 units EC ENGR electives 12 units TBA electives ENGR 180DA/DB or 183 DA/DB (8 unit capstone)	EC ENGR101A EC ENGR 102 EC ENGR 110 EC ENGR111L EC ENGR 113 EC ENGR 131 A 5 courses from EC ENGR 101B, 115A, 121B, 132A, 133A, 141, 170A 12 units EC ENGR electives 12 units TBA electives 8 units of EC ENGR capstone
English, Ethics, 5 GEs	English, Ethics, 5 GEs	English, Ethics, 5 GEs	English, Ethics, 5 GEs

- Civil and Environmental Engineering 110, Mathematics 170A or Statistics 100A
- Selected from Electrical & Computer Engineering 113, 115A, 132A, 141
- Selected from Computer Science 111 through CM 187 or Electrical & Computer Engineering 133A
- These courses need to be selected to enable suitable Computer Science upper division electives; 35L represents extra units; 33 satisfies Electrical Engineering core course
- 12 units of upper division Computer Science courses or 12 units (not used to satisfy other requirements) from an approved list available at <http://www.seasoasa.ucla.edu/undergraduate-technical-breadth-area-tba/>