

**EXECUTIVE COMMITTEE
COLLEGE OF ENGINEERING**

**REPORT TO THE RIVERSIDE DIVISION
MAY 21, 2019**

To be adopted:

**PROPOSED CHANGE TO THE COMPUTER SCIENCE & ENGINEERING UNDERGRADUATE
PROGRAM**

PRESENT:

Major Requirements

Computer Science Major

1. Lower-division requirements (61 units)
 - a) ENGR 001-I
 - b) CS 010 or CS 010V, CS 012 or CS 012V, CS 014, CS 061
 - c) CS 011/MATH 011
 - d) MATH 008B or MATH 009A, MATH 009B, MATH 009C, MATH 010A, MATH 031
 - e) PHYS 040A, PHYS 040B, PHYS 040C
 - f) One course of 4 or more units in an engineering discipline outside the field of computer science to be selected in consultation with a faculty advisor. (Either a lower-division or an upper-division course may be used to satisfy this requirement.)
2. Upper-division requirements (78 units minimum)
 - a) ENGR 101-I
 - b) CS 100, CS 141, CS 150, CS 152, CS 153, CS 161, CS 179 (E-Z)
 - c) CS 120A/EE 120A, CS 120B/EE 120B
 - d) CS 111/MATH 111
 - e) ENGR 180W
 - f) STAT 155
 - g) At least 28 units of technical electives to be chosen from an approved list of courses which currently includes CS 122A, CS 122B, CS 130, CS 133, CS 134, CS 135, CS 145, CS 160, CS 162, CS 164, CS 165, CS 166, CS 168, CS 169, CS 170, CS 171, CS 172, CS 175, CS 177, CS 179 (E-Z) (4 units maximum), CS 180, CS 181, CS 182, CS 183, CS 193 (4 units maximum), ~~EE 140~~, MATH 120, MATH 126, MATH 135A, MATH 135B, PHIL 124.

PROPOSED:

Major Requirements

Computer Science Major

1. Lower-division requirements (61 units)
 - a) ENGR 001-I
 - b) CS 010 ~~or CS 010V~~, CS 012 ~~or CS 012V~~, CS 014, CS 061
 - c) CS 011/MATH 011
 - d) MATH 008B or MATH 009A, MATH 009B, MATH 009C, MATH 010A, MATH 031
 - e) PHYS 040A, PHYS 040B, PHYS 040C
 - f) One course of 4 or more units in an engineering discipline outside the field of computer science to be selected in consultation with a faculty advisor. (Either a lower-division or an upper-division course may be used to satisfy this requirement.)
2. Upper-division requirements (78 units minimum)
 - a) ENGR 101-I
 - b) CS 100, CS 141, CS 150, CS 152, CS 153, CS 161, CS 179 (E-Z)
 - c) CS 120A/EE 120A, CS 120B/EE 120B
 - d) CS 111/MATH 111
 - e) ENGR 180W
 - f) STAT 155
 - g) At least 28 units of technical electives to be chosen from an approved list of courses which currently includes CS 105, CS 122A, CS 122B, CS 130, CS 133, CS 134, CS 135, CS 145, CS 160, CS 162, CS 164, CS 165, CS 166, CS 167, CS 168, CS 169, CS 170, CS 171, CS 172, CS 175, CS 177, CS 179 (E-Z) (4 units maximum), CS 180, CS 181, CS 182, CS 183, CS 193 (4 units maximum), MATH 120, MATH 126, MATH 135A, MATH 135B, PHIL 124

Justification:

The faculty approved to add CS 105 and CS 167 to the list of technical elective courses for CS majors. CS 167 Intro to BIG-DATA Management and CS 105 Data Analysis Methods are recently proposed courses. These courses teach students algorithms and computing tools to process data, and thus are well suited to be included as tech electives.

Approvals:

Approved by the faculty of the Department of
Computer Science & Engineering:

April 11, 2018

Approved by the Executive Committee of the
College of Engineering:

December 4, 2018

Approved by the Committee on Educational Policy:

April 17, 2019