

COMPUTER SCIENCE 2016-2017 B.S. Degree Requirements

CS undergraduate advising: ugrad-help@cs.utah.edu or 801-581-8224

PRE-MAJOR REQUIREMENTS:

C- or better in each course, and a minimum 3.0 average GPA (overall and within pre-major courses) required to apply for full major status.

1. CS 1030, Foundations of CS _____ (3)
2. CS 1410, Object-Orient. Prog. _____ (4)
3. CS 2420, Algrthms/Data Struct. _____ (4)
4. Math 1210, Calculus I (QR) _____ (4)
5. Math 1220, Calculus II (QR) _____ (4)

GENERAL EDU. REQUIREMENTS:

Honors options also accepted for WR2, CW, and AI requirements.

1. Wrtg 2010, Intermediate Writing (WR2) _____ (3)
2. Wrtg 3012 or 3014 or 3015 (CW) _____ (3)
3. American Institutions (AI) _____ (3)

SIX Intellectual Exploration (IE) courses required. TWO must be upper division (3000-level or above), ONE must satisfy the Diversity requirement and ONE must satisfy the International requirement.

4. Fine Arts (FF): _____ (3)
5. Fine Arts (FF): _____ (3)
6. Humanities (HF): _____ (3)
7. Humanities (HF): _____ (3)
8. Social/Behavioral Science (BF): _____ (3)
9. Social/Behavioral Science (BF): _____ (3)

- Upper Division (3000+ level IE) _____
- Upper Division (3000+ level IE) _____
- Diversity (DV) _____
- International (IR) _____

MATH / SCIENCE ELECTIVES:

C- or better required in all math/ science courses. PHYS 2210 Required. CHOOSE 2 of 3: Math 2210-Calc III, Math 2270-Linear Algebra, CS 3130-Eng. Prob. Stats.

TWO additional electives must be 3+ credits each, as follows:

Accepted: Math, science or engineering courses with Math 1220 as a pre- or co-requisite (See DARS). Biol 1210, Chem 1210 also accepted.

NOT Accepted: CS courses (except CS 3130). Math 2200, Math 3010. Math 2250 not accepted if Math 2270 and/or Math 2280 are taken. Math 5010 and/or 3070 not accepted if CS 3130/ ECE 3530 is taken.

1. Physics 2210, Physics I _____ (4)
2. Choose 1: Math 2210 (QR), Math 2270 (QR) or CS 3130_ ()
3. Choose 1: Math 2210 (QR), Math 2270 (QR) or CS 3130_ ()
4. _____ ()
5. _____ ()

The following requirements are restricted to FULL Majors:

C- or better required in all CS courses. CR/NC grading option not allowed for any major requirement. 2.5 GPA (overall & CS courses) required to graduate.

MAJOR REQUIREMENTS:

1. CS 2100, Discrete Structures _____ (3)
2. CS 3500, Software Practice I _____ (4)
3. CS 3505, Software Practice II _____ (3)
4. CS 3810, Computer Organization (QI) _____ (4)
5. CS 4150, Algorithms (QI) _____ (3)
6. CS 4400, Computer Systems (QI) _____ (4)

CS ELECTIVES:

Choose 7 total CS courses, 3000-level or above, 3-4 credits each. Seminars, CS 3992, CS 3130 not accepted.

1. CS _____ / _____ / _____ ()
2. CS _____ / _____ / _____ ()
3. CS _____ / _____ / _____ ()
4. CS _____ / _____ / _____ ()
5. CS _____ / _____ / _____ ()
6. CS _____ / _____ / _____ ()
7. CS _____ / _____ / _____ ()

No more than 3 of the following may be accepted above as CS electives:

- (1) CS 4010, Internship
- (1) CS 4940, Research (if not used for capstone)
- (1) CS 4950, Independent Study
- (1) EAE course (3000+ level, 3+ credits)
- (1) Combination of 1-2 credit CS courses (3 credits total):
CS 3011, 3020, 4190, 5040 and 1-2 credit special topics courses

THEORY RESTRICTED ELECTIVE

Choose ONE: (If both classes are taken, one will count as a CS elective above)

- CS 3100, Models of Computation (QI) _____ (3)
- or
- CS 3200, Scientific Computing _____ (3)

CAPSTONE REQUIREMENT:

Choose ONE set: (Permission required from Undergraduate Director for thesis)

- CS 4000, Senior Capstone Design _____ (3)
- CS 4500, Senior Capstone Project _____ (3)
- or
- CS 4940, Undergraduate Research _____ (3)
- CS 4970, Bachelor's Thesis _____ (3)