**COMPUTER SCIENCE 2016-2017**  B.S. Degree Requirements

CS undergraduate advising: [ugrad-help@cs.utah.edu](mailto: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, Algorithms/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. Wrtrg 2010, Intermediate Writing (WR2) (3)
2. Wrtrg 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)
   - Upper Division (3000+ level IE)
   - Upper Division (3000+ level IE)
   - Diversity (DV)
   - International (IR)

**MATH / SCIENCE ELECTIVES:**


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

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

NOT Accepted: CS courses (except CS 3130). Math 2200, Math 3010. Math 2230 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)

or

CS 4500, Senior Capstone Project (3)

or

CS 4940, Undergraduate Research (3)

CS 4970, Bachelor’s Thesis (3)

See the CS Undergraduate Handbook online for complete details, restrictions & requirements

Updated 5/10/16