

# COMPUTER SCIENCE 2018-2019 B.S. Honors Degree Requirements

Advising: [ugrad-help@cs.utah.edu](mailto:ugrad-help@cs.utah.edu). Schedule appointments online at [cs.utah.edu](http://cs.utah.edu)

Honors Degree requirements: 4 Honors Core, 3 Electives, 1 Thesis

## 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 FF, HF, FF, IR and DV courses. See Honors advisor for 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. Honors Intellectual Traditions (HF, HON): \_\_\_\_\_ (3)
7. Honors Intellectual Traditions (HF, HON): \_\_\_\_\_ (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.*

*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. Math 2270, Linear Algebra \_\_\_\_\_ (4)
3. CS 3130, Eng Prob & Stats (QI) \_\_\_\_\_ (3)
4. \_\_\_\_\_ ( )
5. \_\_\_\_\_ ( )

**\*Honors options available. See Honors advisor for requirements.**

## 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. Only 1 Mobile Apps course will be accepted. Two 6000-level courses accepted toward Honors degree.*

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)
- CS 4998, Honors Project Thesis (HON) \_\_\_\_\_ (1)
- or
- CS 4940, Undergraduate Research \_\_\_\_\_ (3)
- CS 4999, CS Honors Thesis/Project (HON) \_\_\_\_\_ (3)

See the CS Undergraduate Handbook online for complete details, restrictions & requirements  
For exceptions see SoC guidelines, [cs.utah.edu/socguidelines](http://cs.utah.edu/socguidelines)