

# COMPUTER SCIENCE 2017-2018 B.S. Honors Degree Requirements

## Entertainment Arts & Engineering (EAE) emphasis

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 required 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, Algrthm/Data Struct. \_\_\_\_\_ (4)
4. Math 1250 (HON, QR) or 1311 (HON, QR), Calc I \_\_\_\_\_ (4)
5. Math 1260 (HON, QR) or 1321 (HON, QR), Calc II \_\_\_\_\_ (4)

### GENERAL EDU. REQUIREMENTS:

*Honors options also accepted for FF, HF, FF, IR and DV courses. See Honors advisor for requirements.*

1. HONOR 2211, Writing in Honors (WR2, HON) \_\_\_\_\_ (3)
2. HONOR 3200, Research University (CW, HON) \_\_\_\_\_ (3)
3. HONOR 2212, American Institutions (AI, HON) \_\_\_\_\_ (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. ART 1020, Basic Drawing (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.*

*ONE additional math/science elective is required (at least three credits). Choose any non-CS math or science class with Math 1220 (Calculus II) as a pre- or co-requisite. Physics 2220 will also be accepted. Math 2200, 3010, 5010, 3070 not allowed.*

1. Physics 2210, Physics I \_\_\_\_\_ (4)
2. Choose 1: Math 2210 (QR) or Math 2270 \_\_\_\_\_ (3)
3. CS 3130, Eng Prob & Stats (QI) \_\_\_\_\_ (3)
4. \_\_\_\_\_ ( )

### FILM REQUIREMENTS:

*C- or better required in all FILM courses.*

1. FILM 2700, Intro to Video Games \_\_\_\_\_ (3)
2. FILM 3500, Film Production \_\_\_\_\_ (4)

See the CS Undergraduate Handbook online for complete details 3/14/17

### The following requirements are restricted to FULL Majors:

*C- or better required in all CS, EAE & Film courses. CR/NC grades not allowed for any major requirement. 2.5 GPA (overall & within CS) 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)

### EAE REQUIREMENTS:

1. EAE 3600, 3D Modeling \_\_\_\_\_ (3)
2. EAE 3660, Machinima \_\_\_\_\_ (3)
3. CS 4300, Artificial Intelligence \_\_\_\_\_ (3)
4. CS 5530, Databases \_\_\_\_\_ (3)
5. Choose ONE: (If both classes are taken, one counts as a CS elective below)  
CS 5460, Operating Systems \_\_\_\_\_ (4)  
or  
CS 5470, Compilers \_\_\_\_\_ (4)

### CS ELECTIVE

*Choose TWO: 4000+ level CS courses (3-4 cr). Seminars and EAE courses not accepted. (Suggested: CS 4480, 4540, 4600, 5350, 5630, 6000-level for honors)*

1. \_\_\_\_\_ (3)
2. \_\_\_\_\_ (3)

### SERIES REQUIREMENT:

*Choose ONE:*

#### ANIMATION SERIES

- FILM 3610, Computer Animation I \_\_\_\_\_ (4)
- FILM 3620, Computer Animation II \_\_\_\_\_ (4)

*or*

#### GAME DESIGN SERIES

- FILM 3710, Traditional Game Development \_\_\_\_\_ (4)
- FILM 3720, Alternative Game Development \_\_\_\_\_ (4)

### THEORY RESTRICTED ELECTIVE

*Choose ONE:*

- CS 3100, Models of Computation (QI) \_\_\_\_\_ (3)
- or*  
CS 3200, Scientific Computing \_\_\_\_\_ (3)

### CAPSTONE REQUIREMENT

1. EAE 4500, Senior Project I \_\_\_\_\_ (3)
2. EAE 4510, Senior Project II \_\_\_\_\_ (3)
3. CS 4998, Honors Project Thesis (HON) \_\_\_\_\_ (1)