

## Computer Science Degree Plan Catalog 2020-2021

Last Name : \_\_\_\_\_

First Name : \_\_\_\_\_

ID # : \_\_\_\_\_

### Lower Division Requirements (18)

|                          |                                | 2 | 3 | GR | HR |
|--------------------------|--------------------------------|---|---|----|----|
| CS 1301 +                | Intro. to Computer Science     |   |   |    | 3  |
| CS 1101 +                | Intro to Computer Science Lab. |   |   |    | 1  |
| CS 2401 +                | Elem. Data Struct./Algorithms  |   |   |    | 4  |
| MATH 2300/CS 2101&2202 + | Discrete Math/Structures       |   |   |    | 3  |
| CS 2302 +                | Data Structures                |   |   |    | 3  |
| EE 2369 +                | Digital Systems Design I       |   |   |    | 3  |
| EE 2169 +                | Digital Systems Design I Lab   |   |   |    | 1  |

### Core Curriculum (37)\*

| RWS 1301 +          | Rhetoric and Composition 1     |  |  |  | 3 |
|---------------------|--------------------------------|--|--|--|---|
| RWS 1302 +          | Rhetoric and Composition 2     |  |  |  | 3 |
| MATH 1411 +         | Calculus I                     |  |  |  | 4 |
| L., Phil. & Cult. + |                                |  |  |  | 3 |
| Creative Arts +     |                                |  |  |  | 3 |
| Soc. & Beh. Sc. +   |                                |  |  |  | 3 |
| Comp. Area Opt. +   |                                |  |  |  | 3 |
| Comp. Area Opt. +   |                                |  |  |  | 3 |
| HIST 1301 +         | History of U.S. to 1865        |  |  |  | 3 |
| HIST 1302 +         | History of U.S. Since 1865     |  |  |  | 3 |
| POLS 2310 +         | Introduction to Politics       |  |  |  | 3 |
| POLS 2311 +         | American Government & Politics |  |  |  | 3 |

### Other Required Mathematics Courses (9)

| MATH 1312 + | Calculus II                       |  |  |  | 3 |
|-------------|-----------------------------------|--|--|--|---|
| MATH 3323   | Matrix Algebra                    |  |  |  | 3 |
| STAT 3320   | Probability & Statistics for C.S. |  |  |  | 3 |

### Life and Physical Sciences (8)\*

| PHYS 2420 | Introductory Mechanics |  |  |  | 4 |
|-----------|------------------------|--|--|--|---|
|           |                        |  |  |  | 4 |

### Additional Mathematics or Science Option (3)\*

|  |  |  |  |  | 3 |
|--|--|--|--|--|---|

1,2,3= Semester course was taken (1st attempt, 2nd attempt, 3rd attempt)

GR = Grade Received, (precede with "T" if transfer grade) HR = Hours, T = Transfer Credit

(+) Minimum grade of C Required

(\*) See details on the back

### Upper Division Requirements (27)

|           |                                  | 1 | 2 | 3 | GR | HR |
|-----------|----------------------------------|---|---|---|----|----|
| CS 3195   | Jr. Professional Orientation     |   |   |   |    | 1  |
| CS 3331 + | Adv. Object-Oriented Programng   |   |   |   |    | 3  |
| CS 3350   | Automata/Computabi/Formal Lang.  |   |   |   |    | 3  |
| CS 3360   | Design/Implementation Prog. Lan. |   |   |   |    | 3  |
| CS 3432 + | Comp Arch I:Com Org/Design       |   |   |   |    | 4  |
| CS 4310 + | Software Eng: Requirements Eng.  |   |   |   |    | 3  |
| CS 4311   | Software Eng: Design & Implmnt.  |   |   |   |    | 3  |
| CS 4342   | Database management              |   |   |   |    | 3  |
| CS 4375   | Theory of Operating Systems      |   |   |   |    | 3  |
| CS 4175   | Parallel Computing               |   |   |   |    | 1  |

### Technical Electives (15)\*



### Free Electives (3)\*



Total Hours: \_\_\_\_\_

Hours Required: 120 \_\_\_\_\_

Overall GPA: \_\_\_\_\_

CS GPA: \_\_\_\_\_

Advisor: \_\_\_\_\_ Date: \_\_\_\_\_

CS Chair: \_\_\_\_\_ Date: \_\_\_\_\_

All freshman-level courses that are required by specific course number must be completed before the student has completed 90 hours toward the degree.

## **Technical Electives**

15 hours from the following: CS 1110, CS 1120, CS 2210, CS 1190, CS 1290, CS 3000 or 4000 level course. No more than three credit hours of CS 1xxx and CS 2xxx can count for technical electives. No more than six credit hours of CS 1xxx, CS 2xxx, CS 4390, CS 4181, CS 4371, CS 4x73, CS 4392 and/or CS 4393 (in any combination) can count for technical electives.

## **Life and Physical Sciences**

In addition to PHYS 2420, students must complete one semesters of lecture and associated lab. Acceptable courses are: ASTR 1307 & 1107, PHYS 2421, BIOL 1305 & 1107, BIOL 1306 & 1108, CHEM 1305 & 1105, CHEM 1306 & 1106, GEOL 1313 & 1103, GEOL 1314 & 1104. Science courses that count towards the core curriculum (2 lectures and a lab associated with one of the 2 lectures) require grade C or better.

## **Additional Mathematics or Science Option**

Option A: Mathematics. MATH 2313, 2325, 2326, 3320, 3325, 4329, STAT 3381, 4380, 4385.

Option B: Science. An additional 3 credit lecture course from the list above.

## **Discrete Mathematics/Structures**

MATH 2300 or (CS 2101 and CS 2202)

## **Core Curriculum Electives**

### 1. Language, Philosophy and Culture

ENGL 2311, 2312, 2313, 2314, 2318; FREN 2322; HIST 2301, 2302; PHIL 1301, 2306; RS 1301; SPAN 2340; WS 2300, 2350

### 2. Creative Arts

ART 1300; ARTH 1305, 1306; DANC 1304; FILM 1390; MUSL 1324, 1327, 2321; THEA 1313

### 3. Social and Behavioral Sciences

ANTH 1301, 1302, 1310, 2320; CE 2326; COMM 2350, 2372; ECON 2303, 2304; EDPC 1301; EDU 1342; ENGL 2320; GEOG 1310; LING 2320, 2340; PSYC 1301; SOCI 1301, 1310

### 4. Component Area Option (6 credit hours)

BUSN 1301; COMM 1301, 1302; CS 1310, 1320; SCI 1301; UNIV 1301

## **Free Elective**

Courses that may be counted towards the free elective requirement are college-level courses (not remedial) offered by the college of Liberal Arts, Business, Science, or Engineering.