

# Computer Science with Cyber Security Course Plan

## Catalog Year 2019-2020

### Legend

**\* Major Requirement**

Must be taken to fulfill major requirements.

**† Major Elective**

Must be taken to fulfill major requirements, or replaced with an equivalent course.

**‡ Gen-Ed Requirement**

Must be taken to fulfill general education requirements.

**§ Elective**

Can be chosen from a selection of courses.

See MyGFU for detailed academic requirements.

### First Year

#### Fall Semester

Introduction to Computer Science I (CSIS 201) *	3 credits
Calculus I (MATH 201) *	4 credits
Introduction to Communication (COMM 100) ‡	3 credits
Knowing and Being Known (LIBA 100) ‡	3 credits
I Believe (THEO 101) ‡	3 credits
<b>Semester Total</b>	<b>16 credits</b>
<b>Cumulative Total</b>	<b>16 credits</b>

#### Spring Semester

Introduction to Computer Science II (CSIS 202) *	3 credits
Natural Science GE Requirement ‡	4 credits
Social Science GE Requirement ‡	3 credits
History/Politics/International Studies GE Requirement ‡	3 credits
I Believe (THEO 102) ‡	3 credits
<b>Semester Total</b>	<b>16 credits</b>
<b>Cumulative Total</b>	<b>32 credits</b>

## Second Year

### Fall Semester

Data Structures (CSIS 310) *	3 credits
Software Engineering (CSIS 321) *	3 credits
Digital Logic (ENGE 220) *	4 credits
Discrete Mathematics (MATH 260) *	3 credits
HUMA 290 or Fine Arts GE Requirement ‡	3 credits
<b>Semester Total</b>	<b>16 credits</b>
<b>Cumulative Total</b>	<b>48 credits</b>

### Spring Semester

Analysis of Algorithms (CSIS 430) *	3 credits
Object-Oriented Analysis/Design (CSIS 370) *	3 credits
Computer Security Digital Forensics (CSIS 312) *	3 credits
Philosophy & Literature (HUMA 205) ‡	3 credits
Elective Credits §	3 credits
<b>Semester Total</b>	<b>15 credits</b>
<b>Cumulative Total</b>	<b>63 credits</b>

## Third Year

### Fall Semester

Database Systems (CSIS 340) *	3 credits
Data Communication & Networks (CSIS 350) *	3 credits
Computer Architecture (CSIS 360) *	3 credits
Servant Engineering I (ENGR 381) *	2 credits
Bible Elective GE Requirement ‡	3 credits
Elective Credits §	1 credits
<b>Semester Total</b>	<b>15 credits</b>
<b>Cumulative Total</b>	<b>78 credits</b>

### Spring Semester

Secure Software (CSIS 473) *	3 credits
Network Admin (CSIS 450) *	3 credits
Operating Systems (CSIS 460) *	3 credits
Servant Engineering II (CSIS 382) *	2 credits
Lifelong Fitness (HHPE 120) ‡	2 credits
Intercultural GE Requirement ‡	3 credits
<b>Semester Total</b>	<b>16 credits</b>
<b>Cumulative Total</b>	<b>94 credits</b>

## Fourth Year

### Fall Semester

Parallel/Distributed Computing (CSIS 434) *	3 credits
Advanced Cyber Security (CSIS 413) *	3 credits
Cellular & Mobile Technologies (CSIS 390) *	3 credits
Senior Design I (ENGR 481) *	1 credits
Christianity and Culture (LIBA 400) ‡	3 credits
Electives §	3 credits
<b>Semester Total</b>	<b>16 credits</b>
<b>Cumulative Total</b>	<b>110 credits</b>

### Spring Semester

Programming Languages (CSIS 420) *	3 credits
Cyber Defense (CSIS 451) *	4 credits
Senior Design II (ENGR 482) *	3 credits
Electives §	6 credits
<b>Semester Total</b>	<b>16 credits</b>
<b>Cumulative Total</b>	<b>126 credits</b>