

Computer Science with Cyber Security Course Plan

Catalog Year 2020-2021

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
Semester Total	16 credits
Cumulative Total	16 credits

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
Semester Total	16 credits
Cumulative Total	32 credits

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 Alternate Fine Arts GE Requirement ‡	3 credits
Semester Total	16 credits
Cumulative Total	48 credits

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
HUMA 205 or Alternate Philosophy & Literature GE Requirement (HUMA 205) ‡	3 credits
Elective Credits §	3 credits
Semester Total	15 credits
Cumulative Total	63 credits

Third Year

Fall Semester

Database Systems (CSIS 340) *	3 credits
Data Communication & Networks (CSIS 350) *	3 credits
Computer Architecture (CSIS 360) *	3 credits
Cellular & Mobile Technologies (CSIS 390) *	3 credits
Servant Engineering I (ENGR 381) *	2 credits
Elective Credits §	3 credits
Semester Total	17 credits
Cumulative Total	80 credits

Spring Semester

Secure Software (CSIS 473) *	3 credits
Network Administration (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
Semester Total	16 credits
Cumulative Total	96 credits

Fourth Year

Fall Semester

Parallel/Distributed Computing (CSIS 434) *	3 credits
Advanced Cyber Security (CSIS 413) *	3 credits
Programming Languages (CSIS 420) *	3 credits
Senior Design I (ENGR 481) *	1 credits
Bible Elective GE Requirement (THEO 215 or 315) ‡	3 credits
Elective Credits §	3 credits
Semester Total	16 credits
Cumulative Total	112 credits

Spring Semester

Cyber Defense (CSIS 451) *	4 credits
Senior Design II (ENGR 482) *	3 credits
Engaging Christ in Transition (LIBA 400) ‡	3 credits
Elective Credits §	6 credits
Semester Total	16 credits
Cumulative Total	128 credits