

# Four-Year Plan of Study - Fall 2020/Spring 2021

## Computer Science Major

Updated October 2020

### First Year

Semester 1			Crs.
CSCE	106/1001	Fundamentals of Computing I	3
PHYS	111/1011	Classical Mechanics, Sound and Heat	3
PHYS	123L/1012	General Physics Laboratory I	1
MACT	132/1122	Calculus II	3
RHET	110/1010	Freshman Writing	3
CORE	110/1010	Freshman Seminar	3
Total Credit Hours			16

Semester 2			Crs.
CSCE	110/1101	Fundamentals of Computing II	3
CSCE	000/1102	Fundamentals of Computing II Lab (1 cr.)	1
PHYS	112/1021	Electricity and Magnetism	3
PHYS	124L/1022	General Physics Laboratory II	1
MACT	231/2123	Calculus III	3
RHET	120/1020	Research Writing	3
SCI	120/1020	Scientific Thinking	3
LALT	101/1020	Libraries & Learning Technologies	0
Total Credit Hours			17

### Second Year

Semester 3			Crs.
CSCE	230/2301	Digital Design I	3
CSCE	239L/2302	Digital Design I Lab	1
MACT	240/2132	Linear Algebra	3
PHYS	215/2211	Introduction to Electronics	3
PHYS	222L/2213	Electronics Lab for Computer Scientists & Computer Engineers	1
XXXX	XXXX	Pathways 2: Cultural Explorations	3
PHIL	220/2100	Philosophical Thinking	3
Total Credit Hours			17

Semester 4			Crs.
CSCE	321/2202	Analysis & Design of Algorithms	3
CSCE	000/2203	Analysis & Design of Algorithms Lab	1
CSCE	231/2303	Computer Organization & Assembly Language Programming	3
MACT	200/2131	Discrete Mathematics	3
MACT	306/3211	Applied Probability	3
XXXX	XXXX	Global Studies	3
Total Credit Hours			16

### Third Year

Semester 5			Crs.
CSCE	325/3104	Concepts of Programming Languages	3
CSCE	330/3301	Computer Architecture	3
CSCE	339L/3302	Computer Architecture Lab	1
CSCE	XXXX	Computer Science Elective	3
MACT	307/3223	Statistical Inference	3
XXXX	XXXX	Arab World Studies 1	3
Total Credit Hours			16

Semester 6			Crs.
CSCE	341/3701	Software Engineering	3
CSCE	345/3401	Operating Systems	3
CSCE	000/3402	Operating Systems Lab	1
CSCE	XXXX	Computer Science Elective	3
CSCE	XXXX	Computer Science Elective	3
XXXX	XXXX	Arab World Studies 2	3
XXXX	XXXX	Humanities/Social Sciences (Secondary Level)	3
Total Credit Hours			19

### Fourth Year

Semester 7			Crs.
CSCE	422/4201	Theory of Computing	3
CSCE	490/4950	Industrial Training	1
CSCE	491/4980	Senior Project I (Core Capstone I)	1
CSCE	XXXX	Computer Science Elective	3
CSCE	XXXX	Computer Science Elective	3
XXXX	XXXX	General Elective	3
XXXX	XXXX	General Elective	3
Total Credit Hours			17

Semester 8			Crs.
CSCE	447/4101	Compiler Design	3
CSCE	492/4981	Senior Project II (Core Capstone II)	2
CSCE	XXXX	Computer Science Elective	3
XXXX	XXXX	Core Capstone II	3
XXXX	XXXX	General Elective	3
Total Credit Hours			14