

Four-Year Plan of Study - Fall 2013*

Computer Science Major

Updated October 2017

First Year

Semester 1			Crs.
CSCE	106/1001	Fundamentals of Computer Science	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	Programming Fundamentals	3
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			16

Second Year

Semester 3			Crs.
CSCE	210/2201	Data Structure & Algorithms	3
PHYS	215/2211	Introduction to Electronics	3
PHYS	222L/2213	Electronics Lab for Computer Scientists & Computer Engineers	1
MACT	XXXX	Math Elective*	3
XXXX	XXXX	Pathways 2: Cultural Explorations	3
PHIL	220/2100	Philosophical Thinking	3
Total Credit Hours			16

Semester 4			Crs.
CSCE	230/2301	Digital Design I	3
CSCE	239L/2302	Digital Design I Lab	1
CSCE	231/2303	Computer Organization & Assembly Language Programming	3
MACT	200/2131	Discrete Mathematics	3
CSCE	XXXX	Computer Science Elective	3
XXXX	XXXX	Global Studies	3
Total Credit Hours			16

Third Year

Semester 5			Crs.
CSCE	321/3201	Analysis & Design of Algorithms	3
CSCE	325/3104	Concepts of Programming Languages	3
CSCE	330/3301	Computer Architecture	3
CSCE	339L/3302	Computer Architecture Lab	1
MACT	317/3224	Probability & Statistics	3
CSCE	XXXX	Computer Science Elective	3
XXXX	XXXX	Arab World Studies 1	3
Total Credit Hours			19

Semester 6			Crs.
CSCE	341/3701	Software Engineering	3
CSCE	345/3401	Operating Systems	3
MACT	240/2132	Linear Algebra	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			18

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 Electives	3
XXXX	XXXX	Core Capstone II	3
XXXX	XXXX	General Elective	3
Total Credit Hours			14

* For students who have declared before Fall 2018.

1) Major Requirements are according to Fall 2012 Admission/Declaration.

2) Core Curriculum Requirements are according to Fall 2013 Admission.

* Students select one of the following: MACT 233/2141, 304/3143, 310/3145, 406/4212 & 440/4135.