

## Five-Year Plan of Study - Fall 2013\*

### Computer Engineering Major

Updated September 2019

#### First Year

Semester 1				Crs.	Semester 2				Crs.
CSCE	106/1001	Fundamentals of Computer Science		3	CSCE	110/1101	Programming Fundamentals		3
ENGR	101/1001	Introduction to Engineering		1	CHEM	105/1005	General Chemistry I		3
ENGR	115/1005	Descriptive Geometry and Engineering Drawing		2	CHEM	115L/1015	General Chemistry Laboratory		1
PHYS	111/1011	Classical Mechanics, Sound and Heat		3	PHYS	112/1021	Electricity and Magnetism		3
PHYS	123L/1012	General Physics Laboratory I		1	PHYS	124L/1022	General Physics Laboratory II		1
RHET	110/1010	Freshman Writing		3	MACT	132/1122	Calculus II		3
CORE	110/1010	Freshman Seminar		3	RHET	120/1020	Research Writing		3
					LALT	101/1020	Libraries & Learning Technologies		0
Total Credit Hours				16	Total Credit Hours				17

#### Second Year

Semester 3				Crs.	Semester 4				Crs.
CSCE	210/2201	Data Structures and Algorithms		3	CSCE	230/2301	Digital Design I		3
ENGR	212/2102	Engineering Mechanics I (Statics)		3	CSCE	239L/2302	Digital Design I Lab		1
PHYS	215/2211	Introduction to Electronics		3	CSCE	231/2303	Computer Organization & Assembly Language Programming		3
PHYS	222L/2213	Electronics Lab for Computer Scientists & Computer Engineers		1	CSCE	332/3303	Fundamental Microelectronics		3
MACT	200/2131	Discrete Mathematics		3	PHIL	220/2100	Philosophical Thinking		3
SCI	120/1020	Scientific Thinking		3	XXXX	XXXX	Pathways 2: Cultural Explorations		3
Total Credit Hours				16	Total Credit Hours				16

#### Third Year

Semester 5				Crs.	Semester 6				Crs.
CSCE	253/2501	Fundamentals of Database Systems		3	CSCE	345/3401	Operating Systems		3
CSCE	330/3301	Computer Architecture		3	CSCE	363/3611	Digital Signal Processing		3
CSCE	339L/3302	Computer Architecture Lab		1	CSCE	337/3304	Digital Design II		3
CSCE	321/2202	Analysis & Design of Algorithms		3	ENGR	214/2104	Engineering Mechanics II (Dynamics)		3
CSCE	341/3701	Software Engineering		3	MACT	233/2141	Differential Equations		3
MACT	231/2123	Calculus III		3	XXXX	XXXX	Humanities/Social Sciences (Secondary Level)		3
XXXX	XXXX	Global Studies		3					
Total Credit Hours				19	Total Credit Hours				18

#### Fourth Year

Semester 7				Crs.	Semester 8				Crs.
CSCE	445/4411	Fundamentals of Distributed Systems		3	CSCE	432/4301	Embedded Systems		3
CSCE	435/3312	Computer Networks		3	CSCE	438L/4302	Embedded Systems Lab		1
CSCE	439L/3313	Computer Networks Lab		1	CSCE	XXXX	Concentration Elective		3
ENGR	313/3202	Engineering Analysis and Computation I		3	CSCE	XXXX	Concentration Elective		3
MACT	317/3224	Probability and Statistics		3	MACT	240/2132	Linear Algebra		3
XXXX	XXXX	Arab World Studies 1		3	XXXX	XXXX	Arab World Studies 2		3
Total Credit Hours				16	Total Credit Hours				16

#### Fifth Year

Semester 9				Crs.	Semester 10				Crs.
CSCE	490/4950	Industrial Training		1	CSCE	492/4981	Senior Project II (Core Capstone I)		2
CSCE	491/4980	Senior Project I (Core Capstone I)		1	CSCE	XXXX	Concentration Elective		3
CSCE	XXXX	Concentration Elective		3	MGMT	307/3201	Management Fundamentals		3
CSCE	XXXX	Concentration Elective		3	XXXX	XXXX	Core Capstone II		3
ENGR	345/3222	Engineering Economy		3	XXXX	XXXX	General Elective		3
ENGR	364/3322	Fundamentals of Thermofluids		3					
Total Credit Hours				14	Total Credit Hours				14

\* For student who have cedared before Fall 2018

- 1) Major Requirements are according to Fall 2012 Admission/Declaration.
- 2) Core Curriculum Requirements are according to Fall 2013 Admission.