

# B.S. in Computer Engineering

Freshman Year	Credits	
	Fall	Spring
University Seminar	3	
M 171Q - Calculus I	4	
EELE 101 - Introduction to Electrical Fundamentals	3	
CSCI 127 - Joy and Beauty of Data	4	
WRIT 101W - College Writing I		3
M 172 - Calculus II	4	
PHSX 220 - Physics I with Calculus	4	
CSCI 132 - Basic Data Structures and Algorithms	4	
Year Total:	14	15
Sophomore Year	Credits	
	Fall	Spring
M 274 - Introduction to Differential Equation	4	
EGEN 350 - Applied Engineering Data Analysis	2	
PHSX 222 - Physics II with Calculus	4	
EELE 201 - Circuits I for Engineering	4	
EELE 261 - Intro To Logic Circuits	4	
M 221 - Introduction to Linear Algebra		3
M 273 - Multivariable Calculus		4
EELE 203 - Circuits II for Engineering		4
EELE 367 - Logic Design		4
CSCI 112 - Programming with C I		3
Year Total:	18	18
Junior Year	Credits	
	Fall	Spring
University Core Elective *	3	
EELE 308 - Signals and Systems Analysis	4	
EELE 317 - Electronics	4	
EELE 371 - Microprocess HW and SW Systems	4	
CSCI 246 - Discrete Structures	3	
University Core Elective		3
Choose one of the following:		3-4
EELE 321 - Introduction To Feedback Controls		
EELE 477 - Digital Signal Processing		
EELE 465 - Microcontroller Applications		4
Two Professional Electives		6-8
Year Total:	18	16
Senior Year	Credits	
	Fall	Spring
University Core Elective *	3	
EELE 488R - Electrical Engineering Design I	3	
EELE 467 - SoC FPGAs I : Hardware-Software Codesign	4	
One Professional Elective *	3-4	
University Core Elective *		3
EELE 489R - Electrical Engr Design II		3
EELE 487 - Prof, Ethics & Engr Practices		1
EGEN 488 - Fundamentals of Engineering Exam		0

Two Professional Electives *	6-8
Year Total:	13 13
<b>Total Program Credits:</b>	<b>125</b>

\* Elective requirements include 12 credits of humanities, social science, diversity, and arts classes as part of the University Core requirements, 15 credits of approved professional electives from the list below, including a minimum of 6 credits in Computer Science. There must be a minimum of 6 credits at the 300 level or above in the student's professional elective package.

## Professional Electives

ACTG 201	Principles of Financial Accounting	3
ACTG 202	Principles of Managerial Accounting	3
ASTR 371	Solar System Astronomy	4
ASTR 373	Extragalactic Astronomy	3
BCH 380 & BCH 381	Biochemistry and Biochemistry Lab	5
BIOB 105CS	Introduction to Biotechnology	3
BIOB 160	Principles of Living Systems	4
BIOB 170IN	Principles of Biological Diversity	4
BIOH 185	Integrated Physiology I	4
BIOH 201	Human Anatomy and Physiology I	5
BIOH 211	Human Anatomy and Physiology II	4
BIOM 103IN	Unseen Universe: Microbes	3
BMKT 325	Principles of Marketing	3
CHMY 141 & CHMY 142	College Chemistry I and College Chemistry I Lab	4
CHMY 143 & CHMY 144	College Chemistry II and College Chemistry II Lab	4
CHMY 211 & CHMY 212	Elements of Organic Chemistry and Elements of Organic Chemistry Lab	5
CHMY 321 & CHMY 322	Organic Chemistry I and Organic Chemistry I Lab	4
CHMY 323 & CHMY 324	Organic Chemistry II and Organic Chemistry II Lab	4
CSCI 232	Data Structures and Algorithms	4
CSCI 300 & 400 level courses (no more than 1 cr CSCI 494)		
ECNS 309	Managerial Economics	3
EELE 300 & 400 level courses, excluding EELE 354		3
EGEN 200, 300, & 400 level courses		
EIND 300 & 400 level courses		
EMEC 300 & 400 level courses		3
ERTH 101IN	Earth System Sciences	4
ESOF 300 & 400 level courses		
GPHY 121D	Human Geography	3
GPHY 141D	Geography of World Regions	3
GPHY 284	Intro to GIS Science & Cartog	3
M 242	Methods of Proof	3
M 300 & 400 level courses, excluding M 330		
PHSX 224	Physics III	4
PHSX 300 & 400 level courses (no more than 1 cr PHSX 494), excluding PHSX 305 and 499		
WRIT 221	Intermediate Tech Writing	3
WRIT 429	Professional Writing	3