B.S. in Software Engineering

Software Engineering

Freshman Year

Fall		Credits
CEC 220	Digital Circuit Design	3
CEC 222	Digital Circuit Design Laboratory	1
COM 122	English Composition	3
CS 118	Fundamentals of Computer Programming	3
or EGR 115	Introduction to Computing for Engineers	
EGR 101	Introduction to Engineering	2
MA 241	Calculus and Analytical Geometry I	4
UNIV 101	College Success	(1)
	Credits Subtotal	**16.0**
Spring		
COM 219	Speech	3
CS 125	Computer Science I	4
MA 242	Calculus and Analytical Geometry II	4
PS 161	Physics I & II for Engineers	4
	Credits Subtotal	**15.0**

Sophomore Year

Fall		
COM 221	Technical Report Writing (Must earn a C or better to pass COM 221)	3
CS 225	Computer Science II	4
CS 315	Data Structures and Analysis of Algorithms	3
	Humanities Lower-Level Elective	3
MA 225	Introduction to Discrete Structures	3
	Credits Subtotal	**16.0**
Spring		
HU 330	Values and Ethics	3
or HU 335	Technology and Modern Civilization	
	Humanities or Social Science Lower-Level or Upper-Level Elective	3
MA 243	Calculus and Analytical Geometry III	4
PS 250	Physics for Engineers III	3
PS 253	Physics Laboratory for Engineers	1
SE 300	Software Engineering Practices	3
	Credits Subtotal	**17.0**

Junior Year

Fall		
CEC 320	Microprocessor Systems	3
CEC 322	Microprocessor Systems Laboratory	1
CS 317	Files and Database Systems	3
CS 420	Operating Systems	3
MA 412	Probability and Statistics	3
	Technical Elective	3
	Credits Subtotal	**16.0**
Spring		
CEC 470	Computer Architecture	3
MA 345	Differential Equations and Matrix Methods	4
SE 320	Software Construction	3
SE 420	Software Quality Assurance	3
SE 310	Analysis and Design of Software Systems	3
	Credits Subtotal	**16.0**

Senior Year

Fall		
CEC 450	Real-Time Embedded Systems	3
CS 415	Human-Computer Interfaces	3
EC 225	Engineering Economics	3
	Open Elective	3
SE 450	Software Team Project I	3
	Credits Subtotal	**15.0**
Spring		
CS 332	Organization of Programming Languages	3
CS 425	Net-Centric Computing	3
CS 432	Information and Computer Security	3
	Open Elective	3
SE 451	Software Team Project II	3
	Credits Subtotal	**15.0**
	Credits Total:	**126.0**