B.S. in Computer Engineering

Students should be aware that several courses in each academic year may have prerequisites and/or corequisites (check the course descriptions before registering for classes to ensure requisite sequencing).

See the Common Year One outline in the Engineering Fundamentals Program Introduction. CS 223 is a required course for this degree program.

Year One

		Credits
	See the Common First-Year outline in the College of Engineering introduction.	33
	Credits Subtotal	**33.0**

Year Two

COM 221	Technical Report Writing	3
CS 222	Introduction to Discrete Structures	3
CS 225	Computer Science II (and CS 225L)	4
MA 243	Calculus and Analytical Geometry III	4
PS 160	Physics for Engineers II	3
CEC 320	Microprocessor Systems	3
CEC 322	Microprocessor Systems Laboratory	1
EE 223	Linear Circuits Analysis I	3
EE 224	Electrical Engineering Laboratory I	1
MA 345	Differential Equations and Matrix Methods	4
PS 250	Physics for Engineers III	3
PS 253	Physics Laboratory for Engineers	1
	Credits Subtotal	**33.0**

Year Three

CEC 470	Computer Architecture	3
CEC 330	Digital Systems Design with Aerospace Applications (4 credits lecture, 0 credit laboratory)	4
EE 302	Electronic Devices and Circuits	3
EE 304	Electronic Circuits Laboratory	1
EE 300	Linear Circuits Analysis II	3
	Specified Elective ***	3
CEC 300	Computing in Aerospace and Aviation	3
CEC 315	Signals and Systems	3
	Lower or Upper-Level Humanities or Social Sciences	
MA 412	Probability and Statistics	3
SYS 320	Systems Engineering Practices	3
	Credits Subtotal	**29.0**

Year Four

CEC 420	Computer Systems Design I	3
CS 462	Computer Networks	3
	Specified Elective ***	3
CS 420	Operating Systems	3
CEC 410	Digital Signal Processing	3
CEC 411	Digital Signal Processing Laboratory	1
CEC 421	Computer Systems Design II	3
CEC 450	Real-Time Embedded Systems	3
EE 401	Control Systems Analysis and Design	3
EE 402	Control Systems Laboratory	1
	Upper-Level Humanities or Social Sciences	3
	Credits Subtotal	**29.0**
	Credits Total:	**124.0**

* Students in the Computer Engineering program are encouraged to take CS 225 during the first year, postponing COM 219 until the second year.

** EE 401/EE 402, CEC 410/CEC 411, other CEC/EE (300-400) with the approval of the program coordinator.

*** Specified electives are courses to be selected, with the approval of the program coordinator, to support acquiring a minor, an identified concentration of domain knowledge (for example, aerospace, aviation, business, communications, human factors, mathematics, etc.) or further depth in computer engineering or related disciplines.