B.S. in Software Engineering

Suggested Plan of Study

Students should be aware that several courses in each academic year may have prerequisites and/or corequisites. Please check the course descriptions at the back of this catalog 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 Year One outline in the College of Engineering introduction. [*]	33
	Credits Subtotal	**33.0**
Year Two		
CEC 220	Digital Circuit Design	3
CEC 222	Digital Circuit Design Laboratory	1
	Math 300/400 Level Elective [1]	3
COM 219	Speech	3
SE 300	Software Engineering Practices	3
	HU/SS Lower- or Upper-Level Elective	3
CEC 320	Microprocessor Systems	3
CEC 322	Microprocessor Systems Laboratory	1
COM 221	Technical Report Writing	3
MA 412	Probability and Statistics	3
	PS Elective [2]	3
	PS Laboratory [2]	1
	Credits Subtotal	**30.0**
Year Three		
CEC 470	Computer Architecture	3
CS 332	Organization of Programming Languages	3
CS 315	Data Structures and Analysis of Algorithms	3
SE 320	Software Construction	3
CS 420	Operating Systems	3
CS 362	Computing Theory	3
	Specified Elective [3]	3
CS 317	Files and Database Systems	3
SE 310	Analysis and Design of Software Systems	3
	HU/SS Upper-Level Elective	3
	Credits Subtotal	**30.0**
Year Four		
	Technical Elective [4]	3
	Specified Electives [3]	6
	Math 300/400 or Science 200/300/400 Level Elective [5]	3
SE 450	Software Team Project I (2 credits lecture, 1 credit lab)	3
CS 432	Information and Computer Security	3
CEC 450	Real-Time Embedded Systems	3
SE 451	Software Team Project II (1 credit lecture, 2 credits lab)	3
SE 420	Software Quality Assurance	3
	Credits Subtotal	**27.0**
	Credits Total:	**120.0**

[1] To be selected from an approved list of courses maintained by the Program Coordinator.

[2] To satisfy the 7 credit hours requirement, choose one course from the following list (3 credits):
   - CHM 111, GEO 215, WX 201, PS 150, PS 227

And one lecture course from the following plus its corresponding lab (4 credits):
   - BIO 120 and BIO 120L, or CHM 110 and CHM 110L, or PS 224 and PS 224L, or PS 226 and PS 226L,or PS 250 and PS 253

[3] Must be approved by Program Coordinator.

[4] CEC/CS/EE/SE/SYS Upper-Level Elective, with approval from the Program Coordinator.

[5] Not MA 305, or PS 226, or PS 227.