BACHELOR OF SCIENCE
MAJOR IN SYSTEMS ENGINEERING

Following is one suggested four-year degree plan. Students are encouraged to see their advisors each semester for help with their courses selection and enrollment; responsible for reviewing the **Program of Study Requirements**; and must meet **foreign language** and **writing intensive course** requirements for graduation. See Academic Regulations Undergraduate online.

FRESHMAN YEAR

UNIV	1101	Learning in a Global Context I	1
ENGL	1301	English Composition I	3
ENGR	1201	Foundations of Engr I **2413	2
HIST	1301	The U.S. to 1877	3
MATH	2413	Calculus I (MATH 1316 or MATH 2412)	4
CHEM	1111	General Chemistry I Lab (Placement in College Algebra or higher) and **CHEM 1311	1
CHEM	1311	General Chemistry I (Placement in College Algebra or higher) and **CHEM 1111	3
Total			**17**

FRESHMAN YEAR

UNIV	1402	Signature Course	4
ENGR	1202	Foundations of Engr II (ENGR 1201 and MATH 2413)	2
HIST	1302	The U.S. Since 1877	3
MATH	2414	Calculus II (MATH 2413)	4
PHYS	2125	University Physics I Lab **PHYS 2325	1
PHYS	2325	University Physics I (MATH 2413) and **PHYS 2125	3
ENGR	1204	Engineering Graphics **ENGR 1202	2
Total			**19**

SOPHOMORE YEAR

PHYS	2126	University Physics II Lab **PHYS 2326	1
PHYS	2326	University Physics II (MATH 2414, PHYS 2325/2125) and **PHYS 2126	3
ENGL	2311	Technical Communication-WIN	3
ENGR	2103	Statics & Dynamics Lab **ENGR 2303	1
ENGR	2303	Statics & Dynamics (PHYS 2325/2125, MATH 2414) and **ENGR 2103	3
MATH	2415	Calculus III (MATH 2414)	4
		Lang., Phil., & Culture*	3
Total			**18**

SOPHOMORE YEAR

ENGR	2105	Electrical Engr Lab **ENGR 2305	1
ENGR	2305	Electrical Engineering (PHYS 2326, ENGR 1202) and **ENGR 2105	3
ENGR	2376	Cons Prins Thrml Engr (ENGR 2303 and MATH 2415)	3
MATH	3310	Intro to Linear Algebra (MATH 2415)	3
COSC	1136	Fundtls of Progrmg Lab **COSC 1136	1
COSC	1336	Fundtls of Progrmg **COSC 1136	3
MATH	3330	Ordinary Differential Equations (MATH 2415)	3
Total			**17**

JUNIOR YEAR

PSCI	2305	American National Govt	3
SENG	3300	Engineering Economics (MATH 2414)	3
SENG	3310	Intro to Control Systems (ENGR 2305, MATH 3310, COSC 1336/1136, MATH 3330)	3
SENG	3320	Engr Modeling & Design (Junior standing)	3
SENG	3380	Measurements and Devices (ENGR 2305/2105)	3
PHYS	3320	Electromagnetic Field Theory (PHYS 2326/2126, MATH 3330)	3
Total			**18**

JUNIOR YEAR

PSCI	2306	American State Govt	3
ENGR	2372	Engineering Statistics (MATH 2414)	3
SENG	3330	Operations Research I (MATH 3310, SENG 3320)	3
		Engineering Elective[1]	3
SENG	3337	Software Development (COSC 1336/1136)	3
Total			**15**

SENIOR YEAR

SENG	4301	Engr Proj Mgt & Proposal (ENGL 2311, Senior Standing)	3
SENG	4315	Embedded Systems (ENGR 2305 and COSC 1336)	3
SENG	4360	Systems Simulation (SENG 3330)	3
SENG	4330	Operations Research II (ENGR 2372, SENG 3330)	3
		Creative Arts*	3
Total			**15**

SENIOR YEAR

SENG	4350	Facilities Dsgn & Logistics (SENG 3330)	3
SENG	3340	Robotics & Automation (SENG 3310)	3
SENG	4390	SE Senior Dgn Proj (SENG 4301)	3
		Soc/Behavioral Sci*	3
			12

TOTAL SEMESTER CREDIT HOURS: 131

Engineering Electives[1]: 3 SCH selected from SENG 3370, SENG 4340, SENG 4370, SENG 4385, SENG 4152-4352, SENG 4195, and SENG 4199-4399.