

YEAR TERM		MAJOR					MAJOR/CORE		TOTAL CREDITS
YEAR 1	FALL	ETCS 105 2 CAREER DISCOVERY		PHYS 170 4 GENERAL PHYSICS I Co-Req: MATH 170	CHEM 110 4 GENERAL CHEMISTRY I Co-Req: MATH 135 or higher	MATH 170 4 CALCULUS I Pre-Req: Placement Exam or MATH 136 or MATH 141		FCWR 101* 3 FOUNDATIONS OF COLLEGE COMPOSITION Pre-Req: Placement or WRIT 100	17
	SPRING	BIOE 201 3 INTRODUCTION TO BIOENGINEERING Co-Req: ETCS 105 or Dept. Consent	BIOL 110 4 GENERAL BIOLOGY I	PHYS 180 4 GENERAL PHYSICS II Pre-Req: PHYS 170; Co-Req: MATH 180		MATH 180 4 CALCULUS II Pre-Req: MATH 170		FCWR 151* 3 FOUNDATIONS OF RESEARCH WRITING Pre-Req: FCWR 101	18
YEAR 2	FALL	EENG 125 3 FUNDAMENTALS OF DIGITAL LOGIC	BIOL 150 4 GENERAL BIOLOGY II Pre-Req: BIOL 110	MENG 201 3 ENGINEERING PROGRAMMING Co-Req: MATH 170	CHEM 215 4 BIO-ORGANIC CHEMISTRY Pre-Req: CHEM 110	MATH 260 4 CALCULUS III Pre-Req: MATH 180			18
	SPRING	EENG 212 4 ELECTRICAL CIRCUITS I AND ENGINEERING TOOLS Pre-Req: PHYS 180 and MATH 180; Co-Req: MATH 260	BIOL 310 4 HUMAN PHYSIOLOGY Pre-Req: BIOL 210 (waived), CHEM 110			MATH 320 3 DIFFERENTIAL EQUATIONS Pre-Req: MATH 260		FCSP 105 3 FOUNDATIONS OF SPEECH COMMUNICATION	FCWR 304 3 COMMUNICATION FOR TECHNICAL PROFESSIONS Pre-Req: FCWR 151
YEAR 3	FALL	EENG 270 3 INTRODUCTION TO ELECTRONICS CIRCUITS Pre-Req: EENG 211 or EENG 212	BIOE 315 3 INTRODUCTION TO BIOMATERIALS Pre-Req: CHEM 215	MENG 211 3 ENGINEERING MECHANICS I (STATICS) Pre-Req: PHYS 170 and MATH 180	PHYS 365 3 BIOMEDICAL PHYSICS Pre-Req: PHYS 225 (waived), BIOL 150 and CHEM 150	EENG 341 3 SIGNALS AND SYSTEMS Pre-Req: EENG 281		EENG 275 1 ELECTRONICS LAB I Pre-Req: EENG 211 or EENG 212 or EENG 221, and FCWR 101 or FCWR 111	16
	SPRING	BIOE 301 4 BIOMEDICAL INSTRUMENTATION AND DESIGN Pre-Req: EENG 270, MENG 211, PHYS 365	BIOE 402 3 INTRODUCTION TO MEDICAL IMAGING Pre-Req: BIOL 365; Co-req: EENG 341	BIOE 320 3 STATISTICS FOR BIOENGINEERS Pre-Req: MATH 170 and MENG 201	EENG 371 3 MICROPROCESSORS & EMBEDDED SYSTEMS Pre-Req: EENG 125 and CSCI 155	EENG 360 1 ELECTRONICS LAB III Pre-Req: EENG 310, EENG 315 and FCWR 304 (Waived)			14
YEAR 4	FALL	BIOE 489 2 SENIOR DESIGN PROJECT I Pre-Req: BIOE 301, EENG 341 and EENG 371; Co-req: BIOE 401	BIOE 440 3 PROCESS CONTROL IN BIOTECHNOLOGY Pre-Req: EENG 341 and BIOE 301	BIOE 401 1 BIOENGINEERING LABORATORY PRINCIPLES Pre-Req: BIOE 301 and BIOL 310	EENG 403 1 ELECTRONICS LAB IV Pre-Req: EENG 371; Co-Req: EENG 401	BIOENGINEERING ELECTIVE 3 Department Approval Required		ICPH 3XX** 3 PHILOSOPHY CHOICE	13
	SPRING	BIOE 491 2 SENIOR DESIGN PROJECT II Pre-Req: BIOE 401 and EENG 489		GENERAL ELECTIVE 3 Department Approval Required		ICSS 309/ IENG 400 *** 3 TECHNOLOGY AND GLOBAL ISSUES Junior or Senior Status		ICBS 3XX** 3 BEHAVIORAL SCIENCE CHOICE	ICLT 3XX** 3 LITERATURE CHOICE
CREDITS									127

*Non-native English speakers should take FCWR 111 in lieu of FCWR 101 and FCWR 161 in lieu of FCWR 151.

**Pre-Req: FCWR 101, FCWR 151, FCSP 105

†ICSS 309 is cross-listed with IENG 400

(rev. 3/2022)