

YEAR TERM		MAJOR					GENERAL EDUCATION		TOTAL CREDITS
YEAR 1	FALL	ETCS 105 CAREER DISCOVERY 2		PHYS 170 GENERAL PHYSICS I Co-Req: MATH 170 4	CHEM 110 GENERAL CHEMISTRY I Co-Req: MATH 135 or higher 4	MATH 170 CALCULUS I Pre-Req: Requires Placement or MATH 136 or MATH 141 4	FCWR 101/111 FOUNDATIONS OF COLLEGE COMPOSITION Pre-Req: Requires Placement 3		17
	SPRING	BIOE 201 INTRODUCTION TO BIOENGINEERING Co-Req: ETCS 105 or Dept. Consent 3	BIOL 110 GENERAL BIOLOGY I 4	PHYS 180 GENERAL PHYSICS II Pre-Req: PHYS 170; Co-Req: MATH 180 4		MATH 180 CALCULUS II Pre-Req: MATH 170 4	FCWR 151/161 FOUNDATIONS OF RESEARCH WRITING Pre-Req: FCWR 101/111 3		18
YEAR 2	FALL	EENG 125 FUNDAMENTALS OF DIGITAL LOGIC 3	BIOL 150 GENERAL BIOLOGY II Pre-Req: BIOL 110 4	MENG 201 ENGINEERING PROGRAMMING Co-Req: MATH 170 3	CHEM 215 BIO-ORGANIC CHEMISTRY Pre-Req: CHEM 110 4	MATH 260 CALCULUS III Pre-Req: MATH 180 4			18
	SPRING	EENG 212 ELECTRICAL CIRCUITS I AND ENGINEERING TOOLS Pre-Req: PHYS 180 and MATH 180; Co-Req: MATH 260 4	BIOL 310 HUMAN PHYSIOLOGY Pre-Req: BIOL 210 (waived), CHEM 110 4			MATH 320 DIFFERENTIAL EQUATIONS Pre-Req: MATH 260 3	DATA 101 MAKING SENSE OF A DATA-ORIENTED SOCIETY 3	FCWR 304 COMMUNICATION FOR TECHNICAL PROFESSIONS Pre-Req: FCWR 151/161 3	17
YEAR 3	FALL	EENG 270 INTRODUCTION TO ELECTRONICS CIRCUITS Pre-Req: EENG 211 or EENG 212 3	BIOE 315 INTRODUCTION TO BIOMATERIALS Pre-Req: CHEM 215 3	MENG 211 ENGINEERING MECHANICS I (STATICS) Pre-Req: PHYS 170 and MATH 180 3	PHYS 365 BIOMEDICAL PHYSICS Pre-Req: PHYS 225 (waived), BIOL 150 and CHEM 150 3	EENG 341 SIGNALS AND SYSTEMS Pre-Req: EENG 281 3	EENG 275 ELECTRONICS LAB I Pre-Req: EENG 211 or EENG 212 or EENG 221, and FCWR 101 or FCWR 111 1		16
	SPRING	BIOE 301 BIOMEDICAL INSTRUMENTATION AND DESIGN Pre-Req: EENG 270, MENG 211, PHYS 365 4	BIOE 402 INTRODUCTION TO MEDICAL IMAGING Pre-Req: BIOL 365; Co-req: EENG 341 3	BIOE 320 STATISTICS FOR BIOENGINEERS Pre-Req: MATH 170 and MENG 201 3	EENG 371 MICROPROCESSORS & EMBEDDED SYSTEMS Pre-Req: EENG 125 and CSCI 155 3	EENG 360 ELECTRONICS LAB III Pre-Req: EENG 310, EENG 315 and FCWR 304 (Waived) 1			14
YEAR 4	FALL	BIOE 489 SENIOR DESIGN PROJECT I Pre-Req: BIOE 301, EENG 341 and EENG 371; Co-req: BIOE 401 2	BIOE 440 PROCESS CONTROL IN BIOTECHNOLOGY Pre-Req: EENG 341 and BIOE 301 3	BIOE 401 BIOENGINEERING LABORATORY PRINCIPLES Pre-Req: BIOE 301 and BIOL 310 1	EENG 403 ELECTRONICS LAB IV Pre-Req: EENG 371; Co-Req: EENG 401 1	BIOENGINEERING ELECTIVE Department Approval Required 3	ICXX 3XX* SEMINAR CHOICE (ICBS, ICLT, ICPH, or ICSS) Pre-Req: FCWR 151/161 3		13
	SPRING	BIOE 491 SENIOR DESIGN PROJECT II Pre-Req: BIOE 401 and EENG 489 2		GENERAL ELECTIVE Department Approval Required 3		IENG 400 TECHNOLOGY AND GLOBAL ISSUES Junior or Senior Status 3	ICXX 3XX* SEMINAR CHOICE (ICBS, ICLT, ICPH, or ICSS) Pre-Req: FCWR 151/161 3	ICXX 3XX* SEMINAR CHOICE (ICBS, ICLT, ICPH, or ICSS) Pre-Req: FCWR 151/161 3	14
CREDITS									127

(rev. 3/23)

\*Of the three required ICXX seminar course options (ICBS, ICLT, ICPH, ICSS), students must take three seminar courses from three different areas of study.

Co-Op Option: ETCS 300 (Foundations for Success in CoECS Co-Op) and ETCS 301 (CoECS Co-Op)