Current

DEGREE: BACHELOR OF COMPUTER ENGINEERING

MAJOR: COMPUTER ENGINEERING

Revised

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CURRICULUM	CREDITS	CURRICULUM	CREDITS
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Parenthesized figures indicate year and semester in which the course should be taken. (1 = freshman, 2 = sophomore, 3 = junior, 4 = senior) and semester (F= fall, S = spring)		Parenthesized figures indicate year and semester in which the course should be taken. $(1 = \text{freshman}, 2 = \text{sophomore}, 3 = \text{junior}, 4 = \text{senior})$ and semester $(F = \text{fall}, S = \text{spring})$	
UNIVERSITY REQUIREMENTS		UNIVERSITY REQUIREMENTS	
ENGL 110 Critical Reading and Writing (minimum grade C-)	3(1F)	ENGL 110 Critical Reading and Writing (minimum grade C-)	3(1F)
First Year Experience (FYE)	0-4	First Year Experience (FYE)	0-4
Discovery Learning Experience (DLE)	3	Discovery Learning Experience (DLE)	3
Breadth Requirements	12	Breadth Requirements	12
Multi-cultural Course(s)	3	Multi-cultural Course(s)	3
Major Requirements		Major Requirements	
Breadth Requirements	21	Breadth Requirements	21
College of Engineering Breadth Requirements The College of Engineering requires 21 total Breadth Requirement credits (essentially 9 credits in addition to the University Breadth Requirement.) • If chosen carefully, up to 3 credits from each of the University Breadth Requirement categories may be used to simultaneously satisfy the College of Engineering Breadth Requirements for this major. • Of the 21 credits, 6 credits must be at the Upper Level (usually 300 level or higher) as designated on the College of Engineering Breadth Requirement list. • Of the 21 credits, 3 credits may be used to satisfy the University Multicultural Requirement (recommended for timely progress toward degree completion.) • All Breadth Requirement coursework must be passed with a minimum grade of C		College of Engineering Breadth Requirements The College of Engineering requires 21 total Breadth Requirement credits (essentially 9 credits in addition to the University Breadth Requirement.) • If chosen carefully, up to 3 credits from each of the University Breadth Requirement categories may be used to simultaneously satisfy the College of Engineering Breadth Requirements for this major. • Of the 21 credits, 6 credits must be at the Upper Level (usually 300-level or higher) as designated on the College of Engineering Breadth Requirement list. • Of the 21 credits, 3 credits may be used to satisfy the University Multicultural Requirement (recommended for timely progress toward degree completion.) • All Breadth Requirement coursework must be passed with a minimum grade of C	
One of the following four courses must be taken:	3(3F)	One of the following four courses must be taken:	3(3F)
ENGL 301 Expository Writing		ENGL 301 Expository Writing	
ENGL 312 Written Communications in Business		ENGL 312 Written Communications in Business	
ENGL 410 Technical Writing		ENGL 410 Technical Writing	
ENGL 413 Topics in Professional Writing		ENGL 413 Topics in Professional Writing	
EGGG 101 Introduction to Engineering	2(1F)	EGGG 101 Introduction to Engineering	2(1F)
MATH 241 Analytic Geometry and Calculus A	4(1F)	MATH 241 Analytic Geometry and Calculus A	4(1F)
MATH 242 Analytic Geometry and Calculus B	4(1S)	MATH 242 Analytic Geometry and Calculus B	4(1S)
MATH 243 Analytic Geometry and Calculus C	4(2F)	MATH 243 Analytic Geometry and Calculus C	4(2F)
MATH 341 Differential Equations with Linear Algebra I	3(2S)	MATH 341 Differential Equations with Linear Algebra I	3(2S)
MATH 342 Differential Equations with Linear Algebra II	3(3F)	MATH 342 Differential Equations with Linear Algebra II	3(3F)
CHEM 103 General Chemistry	4(1F)	CHEM 103 General Chemistry	4(1F)
PHYS 207 Fundamentals of Physics I	4(1S)	PHYS 207 Fundamentals of Physics I	4(1S)
PHYS 208 Fundamentals of Physics II	4(2F)	PHYS 208 Fundamentals of Physics II	4(2F)
CISC 106 General Computer Science for Engineers	3(1F)	CISC 106 General Computer Science for Engineers	3(1F)
CISC 181 Introduction to Computer Science II	3(1S)	CISC 181 Introduction to Computer Science II	3(1S)

CISC 220 Data Structures	3(2F)	CISC 220 Data Structures	3(2F)
CISC 361 Operating Systems	3(3S)	CISC 361 Operating Systems	3(3S)
Students with adequate programming experience may substitute the CISC 181, CISC 220, and CISC 280 sequence for CISC 106, CISC 181 and CISC 220 sequence.	3(38)	Students with adequate programming experience may substitute the CISC 181, CISC 220, and CISC 280 sequence for CISC 106, CISC 181 and CISC 220 sequence.	3(33)
CPEG 202 Introduction to Digital Systems	3(1S)	CPEG 202 Introduction to Digital Systems	3(1S)
CPEG 222 Microprocessor Based Systems	4(2S)	CPEG 222 Microprocessor Based Systems	4(2S)
CPEG 323 Introduction to Computer System Engineering	3(3F)	CPEG 323 Introduction to Computer System Engineering	3(3F)
CPEG 324 Computer Systems Design I	3(3S)	CPEG 324 Computer Systems Design I	3(3S)
CPEG 419 Computer Communication Networks	3(4F)	CPEG 419 Computer Communication Networks	3(4F)
ELEG 205 Analog Circuits I	4(2F)	ELEG 205 Analog Circuits I	4(2F)
ELEG 305 Signals and Systems	3(2S)	ELEG 305 Signals and Systems	3(2S)
ELEG 309 Electronic Circuit Analysis I	4(2S)	ELEG 309 Electronic Circuit Analysis I	4(2S)
ELEG 310 Random Signals and Noise	3(3S)	ELEG 310 Random Signals and Noise	3(3S)
ELEG 320 Field Theory I	4(3F)	ELEG 320 Field Theory I	4(3F)
ELEG 491 Ethics and Impacts of Engineering	2(4S)	ELEG 491 Ethics and Impacts of Engineering	3(4S)
One of the following five foundation elective courses must be taken: 3S	3	One of the following five foundation elective courses must be taken: 3S	3
ELEG 306 Digital Signal Processing		ELEG 306 Digital Signal Processing	
ELEG 312 Electronic Circuit Analysis II		ELEG 312 Electronic Circuit Analysis II	
ELEG 403 Communication Systems Engineering		ELEG 403 Communication Systems Engineering	
ELEG 413 Field Theory II		ELEG 413 Field Theory II	
ELEG 418 Digital Control Systems		ELEG 418 Digital Control Systems	
Design Requirement (DLE)	6(4F&S)	Design Requirement (DLE)	6(4F&S)
In addition to the content of the normal program, every student must take at least six credits in CPEG course designated as "design." Regularly offered CPEG design courses include CPEG 498 offered in the fall and CPEG 499 offered in the spring.		In addition to the content of the normal program, every student must take at least six credits in CPEG course designated as "design." Regularly offered CPEG design courses include CPEG 498 offered in the fall and CPEG 499 offered in the spring.	
Technical Electives	12	Technical Electives	12
In addition to the design requirement, each student, in consultation with their advisor, must select a program of technical electives satisfying the following: (1) With some exceptions, technical electives consist of 300-level or above engineering, mathematics, natural sciences, and computer science courses. With the permission of the student's advisor, certain 200-level courses, such as PHYS 211, are permitted. (2) At least 12 technical elective credits must be taken. (3) Of the 12 technical elective credits, at least 6 must be in CPEG or ELEG courses.		In addition to the design requirement, each student, in consultation with their advisor, must select a program of technical electives satisfying the following: (1) With some exceptions, technical electives consist of 300-level or above engineering, mathematics, natural sciences, and computer science courses. With the permission of the student's advisor, certain 200-level courses, such as PHYS 211, are permitted. (2) At least 12 technical elective credits must be taken. (3) Of the 12 technical elective credits, at least 6 must be in CPEG or ELEG courses.	
CREDITS TO TOTAL A MINIMUM OF	125	CREDITS TO TOTAL A MINIMUM OF	126