

TECHNICAL ELECTIVES CONTINUED

Multimedia Systems	ECE 434	F	3	ECE 317
Computer Communication Networks II	ECE 436	Sp	3	ECE 333
Wireless Communications	ECE 437	F	3	ECE 311 and ECE 341
Power Semiconductor Devices & Integ. Circuits	ECE 442	Sp	4	ECE 342 and ECE 346
Analysis & Design of Power Electronic Circuits	ECE 445	F	4	ECE 342; and grade of C or better in ECE 310
Transistors	ECE 448	Sp	3	ECE 346
Microdevices and Micromachining Technology	ECE 449	Sp	4	ECE 347; or consent of the instructor
Control Engineering	ECE 451	F	3	ECE 350
Robotics: Algorithms and Control	ECE 452	Sp	3	CS 201; & gr. of C or bett. in ECE 210 or gr. of C or bett. in ECE 225
Electromechanical Energy Conversion	ECE 458	F	3	Grade of C or better in ECE 225
Analog and Mixed-Signal VLSI Design	ECE 468	Sp	4	ECE 467
Computer Systems Design	ECE 469	Sp	3	CS 366; or ECE 366 and ECE 368
Compiler Design	CS 473		3	C or bett. in CS 301 or MCS 441 and CS 202 or MCS 360 and CS 266
Networked Operating Systems Programming	CS 485		4	CS 385
Coding and Cryptography	MCS 425		3	Gr. of C or bett. in MCS 261 & CS 202 & MATH 310 or 320 or 330

NONENGINEERING AND GENERAL EDUCATION REQUIREMENTS(50 hrs)

COURSE TITLE	NUMBER	HRS.	PREREQUISITES
General College Chemistry I*b	Chem 112	5	C or better in CHEM 101 or adequate performance on the UIC chemistry placement exam
Academic Writing I:WAPC	ENGL 160	3	Performance on Dept. Placement Test
Academic Writing II:WIR	ENGL 161	3	ENGL 160 or the equivalent
Exploring World Cultures course*a		3	
Understanding the Creative Arts course*a		3	
Understanding the Past course*a		3	
Understanding the Individual and Society course*a		3	
Understanding US Society course*a		3	
Calculus I*b	MATH 180	5	C or better in MATH 121 or app. perf. on the dept. pl. test
Calculus II*b	MATH 181	5	C or better in MATH 180
Calculus III*b	MATH 210	3	C or better in MATH 181
Introduction to Differential Equations I	MATH 220	3	C or better in MATH 210
General Physics I (Mechanics)*b	PHYS 141	4	Grade of C or bett. in MATH 180
General Physics II (Electricity and Magnetism)*b	PHYS 142	4	MATH 181; & Gr. of C or bett. in either in Phys 141 or both PHYS 105/106

*a-Consult General Education section of the catalog for approved courses in this category ; *b-Course approved for the Analyzing the Natural World General Education category

Additional Mathematics Course

(Students must complete at least one of the following courses.)

Applied Linear Algebra	MATH 310	3	C or better in MATH 210
Advanced Calculus I	MATH 410	3	C or better in MATH 210
Complex Analysis with Applications	MATH 417	3	C or better in MATH 210
Applied Partial Differential Equations	MATH 481	3	C or better in MATH 220
Numerical Analysis	MCS 471	3	C or better in MCS 275 or CS 102 or 108 or cons. of the inst.

FREE ELECTIVES(3 hrs)

Students must select* courses from outside the ECE Department.

(*Students preparing for the Fundamentals of Engineering Examination, which leads to becoming a Licensed Professional Engineer, are advised to use these hours to take the course CME 201, Statics; and one course from the following courses: CME 203, Strength of Materials; CME 260, Properties of Materials; ME 211, Fluid Mechanics I.)

UIC Computer Engineering Curriculum - Suggested Schedule of Courses (12/1/09)

