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MAJOR IN ELECTRICAL ENGINEERING, ELECTRICAL ENGINEERING CONCENTRATION

Major Completion Map

Distinctive Requirements for Degree Program:

TO PREPARE FOR FIRST SEMESTER: The curriculum for this major assumes students enter college prepared to take calculus.

In order to maintain professional standards required of practicing engineers, the Department of Electrical and Computer Engineering requires a cumulative grade point average of at least 2.000 in electrical engineering courses as a graduation requirement. It is the responsibility of any student who fails to maintain a 2.000 average to work with their advisor to correct grade point deficiencies. ECE courses required for the major at the 100, 200, and 300 level must be passed with a minimum grade of C (2.000); grades below a C will require the student to retake the course. ECE courses designated as an elective are exempt from the C or higher minimum grade requirement.

Freshman					
Semester 1		Critical	Recommended	AUCC	Credits
CO 150	College Composition (GT-CO2)		Х	1A	3
ECE 102 or 103	Digital Circuit Logic DC Circuit Analysis	Х			3-4
MATH 160	Calculus for Physical Scientists I (GT-MA1)	х		1B	4
First course fron	n Group A, B, or C (See options in Program Requirements Tab) X		3B	3
	Total Credits				14
Semester 2		Critical	Recommended	AUCC	Credits
ECE 103 or 102	DC Circuit Analysis Digital Circuit Logic	Х			3-4
MATH 161	Calculus for Physical Scientists II (GT-MA1)	Х		1B	4
PH 141	Physics for Scientists and Engineers I (GT-SC1)	Х		ЗA	5
Remaining cours Requirements Ta	se(s) from Group A, B, or C (See options in Program ab)	х			4
	Total Credits				16
Sophomore					
Semester 3		Critical	Recommended	AUCC	Credits
ECE 251	Introduction to Microcontrollers and IoT	Х			4
MATH 261	Calculus for Physical Scientists III	Х			4
PH 142	Physics for Scientists and Engineers II (GT-SC1)	Х		ЗA	5
Science/Math/E	ngineering Electives (See List on Program Requirements Tab)	Х		3
	Total Credits				16
Semester 4		Critical	Recommended	AUCC	Credits
CHEM 111	General Chemistry I (GT-SC2)		Х	ЗA	4
ECE 202	Circuit Theory Applications	Х			4
ECE 232	Introduction to Project Practices	Х			1
ECE 303/ STAT 303	Introduction to Communications Principles	Х			3
MATH 340	Intro to Ordinary Differential Equations	Х			4
	Total Credits				16
Junior					
Semester 5		Critical	Recommended	AUCC	Credits
ECE 311	Linear System Analysis I	Х			3
ECE 331	Electronics Principles I	Х			4
ECE 341	Electromagnetic Fields and Devices I	Х			3
Select one cours	se from the following:				3
CO 301B	Writing in the Disciplines: Sciences (GT-CO3)		Х	2	
JTC 300	Strategic Writing and Communication (GT-CO3)		Х	2	

	Total Credits				15
Semester 6		Critical	Recommended	AUCC	Credits
ECE 312	Linear System Analysis II	Х			3
ECE 332	Electronics Principles II	Х		4A	4
ECE 342	Electromagnetic Fields and Devices II	Х			3
Science/Math	n/Engineering Electives (See List on Program Requirements Tab)		Х		3
	ity, and Inclusion (http://catalog.colostate.edu/general-catalog/ core-curriculum/aucc/#diversity-equity-inclusion)		Х	1C	3
	Total Credits				16
Senior					
Semester 7		Critical	Recommended	AUCC	Credits
ECE 401	Senior Design Project I	Х		4A,4B	3
Technical Electives (See List on Concentration Requirements Tab)		Х			ç
Arts and Humanities (http://catalog.colostate.edu/general-catalog/all- university-core-curriculum/aucc/#arts-humanities)			Х	3B	Э
Historical Perspectives (http://catalog.colostate.edu/general-catalog/all- university-core-curriculum/aucc/#historical-perspectives)			Х	3D	3
	Total Credits				18
Semester 8		Critical	Recommended	AUCC	Credits
ECE 402	Senior Design Project II	Х		4C	3
ECON 202	Principles of Microeconomics (GT-SS1)	Х		3C	3
Technical Ele	ctives (See List on Concentration Requirements Tab)	Х			ç
The benchma entire prograr	rk courses for the 8th semester are the remaining courses in the n of study.	X			
	Total Credits				15
	Program Total Credits:				126