

Bachelor of Science in Electrical Engineering[†]

Department of Electrical and Computer Engineering

Mapping of Courses to Program Outcomes

Program Outcomes							
H = High M = Medium L = Low	(a) Apply knowledge of mathematics, science, and engineering	(b) Design and conduct experiments, as well as analyze and interpret data	(c) Design a system, component, or process to meet desired needs within realistic constraints, e.g. economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability	(d) Function on multi-disciplinary teams	(e) Identify, formulate, and solve engineering problems	(f) Understand professional and ethical responsibility	(g) Communicate effectively
Curriculum							
Calculus	H				L		
Physics	H	L					
Chemistry 151	H	L					
MSE 110	H				M		
English							H
ENGR 102 Intro Engineering			M	M		L	M
ECE 175 Computer Programming	H		H				H
ECE 274 Digital Logic	H	H	H		H		
ECE 220 Basic Circuits	H	H			H		H
Differential Eqns.	H						
ECE 301 Electrical Engineering Lab		H					M
ECE 320a Circuit Theory	H		L		H		
ECE 351a Electronic Circuits	H				H		
Math Analysis	H				L		

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Curriculum							
SIE 305 Prob. & Statistics	H	L	L		M		
ECE 304 Design Electronic Circuits	H	H	L		H		
ECE 340 Engineering Systems Analysis	H				H		
ECE 372 Microprocessor Organization		M	H	L			M
ECE 381 Electromagnetics	H				H		
Engr 498a Senior Capstone I			H	H		H	H
ECE 352 Device Electronics	H				H		
Engr 498a Senior Capstone II		M	H	H		M	H
Technical Electives	H		L		H		
INDIV/TRAD/Humanities/Art						L	L

H = High M = Medium L = Low	(h) Broad education necessary to understand the impact of eng'g solutions in a global, economic, environmental, and societal context	(i) Recognition of the need for, and an ability to engage in, life-long learning	(j) Knowledge of contemporary issues	(k) Use the techniques, skills, and modern engineering tools necessary for engineering practice
Curriculum				
Calculus				
Physics			L	L
Chemistry 151				L
MSE 110	L			
English				
ENGR 102 Intro Engineering	M	L	L	
ECE 175 Computer Programming				H
ECE 274 Digital Logic				H
ECE 220 Basic Circuits				H
Differential Eqns.				
ECE 301 Electrical Engineering Lab				H
ECE 320a Circuit Theory				M
ECE 351a Electronic Circuits				
Math Analysis				
SIE 305 Prob. & Statistics				
ECE 304 Design Electronic Circuits				M
ECE 340 Engineering Systems Analysis				H
ECE 372 Microprocessor Organization				
ECE 381 Electromagnetics				

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Curriculum				
Engr 498a Senior Capstone I	H	L	L	H
ECE 352 Device Electronics				
Engr 498a Senior Capstone II		L	L	H
Technical Electives	L	H	M	L
INDIV/TRAD/Humanities/Art	H	L	L	