

Electrical Engineering, B.S.

Accredited by the Engineering Accreditation Commission of ABET, <https://www.abet.org/>

Course	Title	Semester Credit Hours
Freshman Year		
Semester 1		
CHEM 1311 & CHEM 1111	General Chemistry I and General Chemistry I Lab	4
CSEN 2304	Introduction to Computer Science	3
Rhetoric & Composition		3
MATH 2413	Calculus I	4
GEEN 1201	Engineering as a Career	2
Semester Credit Hours		16
Semester 2		
EEEN 2340	Digital Logic Design	3
Rhetoric & Composition		3
American History		3
MATH 2414	Calculus II	4
PHYS 2325 & PHYS 2125	University Physics I and University Physics I Lab	4
Semester Credit Hours		17
Sophomore Year		
Semester 1		
EEEN 3449	Microprocessor Systems	4
American History		3
MATH 3320	Differential Equations	3
PHYS 2326 & PHYS 2126	University Physics II and University Physics II Lab	4
Government/Political Science		3
Semester Credit Hours		17
Semester 2		
EEEN 2323	Network Analysis I	3
EEEN 3334	Random Signals	3
Government/Political Science		3
Lang/Phil/Culture		3
Communication		3
Semester Credit Hours		15
Junior Year		
Semester 1		
EEEN 3212	Circuits and Electronics Lab	2
EEEN 3321	Network Analysis II	3
EEEN 3325	Electronics I	3
Creative Arts		3
MATH 3415	Calculus III	4
Semester Credit Hours		15
Semester 2		
CEEN 3317	Engineering Economics	3
EEEN 3324	Electromagnetics	3
EEEN 3333	Linear Systems and Signals	3
Social/Behavioral		3

MATH 4341	Linear Alg and Matrix Theory	3
Semester Credit Hours		15
Senior Year		
Semester 1		
EEEN 4252	Advanced Laboratory	2
Prescribed Elective ¹		3
Prescribed Elective ¹		3
Approved Elective ²		3
Approved Elective ²		3
Semester Credit Hours		14
Semester 2		
EEEN 4224	Elec & Comp Eng Proj Lab (WI)	2
Prescribed Elective ¹		3
Approved Elective ²		3
Approved Elective ²		3
Semester Credit Hours		11
Total Credit Hours Required:		120

¹ Prescribed major-related electives must be selected from the following:

Code	Title	Semester Credit Hours
EEEN 4329	Communications Engineering	
EEEN 4342	Electronic II	
EEEN 4354	Linear Control Systems	
EEEN 4355	Digital Systems Engineering	
EEEN 4422	Electric Drives	

² List of approved electives:

Code	Title	Semester Credit Hours
EEEN 4310	Intro to VLSI Circuit Design	
EEEN 4335	Special Problems	
EEEN 4336	Selected Topics	
EEEN 4340	Power Electronics	
EEEN 4344	Computr Architectr and Design	
EEEN 4357	Wireless Sensor Networks	
EEEN 4358	Embedded Systems	
EEEN 4360	Robotics II	
EEEN 4371	Mechatronic Systems	
CSEN 2306	Object-Oriented Programming	
CSEN 4360	Cloud Computing	
CSEN 4367	Data Mining	
CSEN 4370	Cyber Intelligence	
CSEN 4372	Cyber Security	
CSEN 4375	Machine Learning	
CSEN 4380	Artificial Intelligence	
MEEN 3347	Thermodynamics	
MEEN 4355	Robotics I	
MEEN 4371	Introduction to UAVs	

MEEN 4372	Resource Optimization for DHS
MEEN 4373	Info Anal. & Mod. in Sec Eng