

Table 5-1 Curriculum for Electrical Engineering – Bachelor of Science (Revised 1/12/2021)

Note: This revision of Table 5.1 applies the Yale College wide conversion factor of 1 Yale College credit being equivalent to 4 credit-hours. This conversion factor was applied during Yale’s institutional accreditation by the New England Association of Schools and Colleges (NEASC) /New England Commission of Higher Education (NECHE) and is now being used across campus for program-based accreditation.

Course (Department, Number, Title) List all courses in the program by term starting with the first term of the first year and ending with the last term of the final year.	Indicate whether course is Required, Elective or a Selected Elective by an R, an E or an SE. ¹	Subject Area (Credit Hours)			Last Two Terms the Course was Offered: Year and, Semester, or Quarter	Maximum Section Enrollment for the Last Two Terms the Course was Offered ²
		Math & Basic Sciences	Engineering Topics; Check if Contains Significant Design (√)	Other		
First Year Fall						
MATH 112a, Calculus I	R	4			F19, F18	139
Humanities/Social Science Electives	E			12		
First Year Spring						
MATH 115b, Calculus II	R	4			S20, S19	267
ENAS 130b, Intro to Computing	R		4		S20, S19	66
EENG201b, Intro to Computer Engineering	R		4(√)		S20, S19	41
Humanities/Social Science Electives	E			8		
Second Year Fall						
ENAS 151a, Multivariable Calculus for Engineers or MATH 120a, Calculus of Functions of Several Variables	R	4			F19, F18	84
Physics 180a, Advanced General Physics	R	4			F19, F18	277
EENG200a, Intro to Electronics	R		4		F19, F18	61
ENAS 194a, Differential Equations and Applications	R	4			F19, F18	76
Humanities/Social Science Elective	E			4		
Second Year Spring						
Physics 181b, Advanced General Physics	R	4			S20, S19	230
Math 222b, Linear Algebra	R	4			S20, S19	131
Humanities/Social Science Elective	E			8		
Third Year Fall						
EENG202a, Communications, Computation and Control	R		4		F19, F18	22
EENG320a, Semiconductor Device Fundamentals	R		4		F19, F18	9

EENG348a, Digital Systems	R		4 (√)		F19, F18	37
Humanities/Social Science Elective	E			8		
Third Year Spring						
EENG203b, Circuits and Systems Design	R		4 (√)		S20, S19	18
EENG310b, Signals and Systems	R		4		S20, S19	7
Humanities/Social Science Elective	E			8		
Fourth Year Fall						
EENG325a, Electronic Circuits	R		4 (√)		F19, F18	6
STAT 241a, Probability theory	R	4			F19, F18	
EENG Electives	SE		8			
Humanities/Social Science Elective	E			4		
Fourth Year Spring						
APHYS 322b, Electromagnetic Waves and Devices	R	4			S20, S19	
EENG481b, Advanced ABET Project	R		4(√)		S20, S19	6
EENG Electives	SE		8			
TOTALS (in terms of semester credit hours) Total must satisfy minimum credit hours		36	56	52		
Minimum Semester Credit Hours		30	45			

1. **Required** courses are required of all students in the program, **Elective** courses (often referred to as open or free electives) are optional for students, and **Selected Elective** courses are those for which students must take one or more courses from a specified group.
2. For courses that include multiple elements (lecture, laboratory, recitation, etc.), indicate the maximum enrollment in each element. For Selected Elective courses, indicate the maximum enrollment for each option.