

**Integrated Business and Engineering Honors Program  
Curriculum for a Major in Electrical Engineering (Updated by Doug Frey 11/23/15)**

**All IBE Students Should Follow the Common Freshman Year Curriculum**

**Sophomore Year, Fall Semester**

Credits	Course	Description	Semester	Prerequisites
4	ECE 33	Intro. Comp. Engin.	F	Engr 010 or Csc 17
4	ECE 81	Princ. Electrical Engin.	F	Math 22, Phys 21 (PC)
4	Physics 21	Introductory Physics II	F,S	Phys 11, Math 23 (PC)
1	Physics 22	Physics Lab	F,S	Physics 12, Phys 21 (Co pref.)
4	Math 23	Calculus III	F,S	Math 22
1	IBE 150	IBE Sophomore Lab	F	IBE 095
18	Semester total			
52	Cumulative credits			

**Sophomore Year, Spring Semester**

Credits	Course	Description	Semester	Prerequisites
2	ECE 121	Circuits Lab	S	ECE 123 (Co)
3	ECE 123	Electronic Circuits	S	ECE 81
3	ECE 126 (see note 1)	Fund. Semiconductor Dev.	S	ECE 81
3	Math 205	Linear Systems	F,S	Math 23 (PC)
3	Acct 151	Intro. Financial Accounting	F,S	Sophomore standing, Eco 1
3	Math 231	Prob. & Statistics	F,S	Math 22
17	Semester total			
69	Cumulative credits	ECE136 or ECE202 may be substituted		

**Junior Year, Fall Semester**

Credits	Course	Description	Semester	Prerequisites
4	ECE 108	Signals & Systems	F	ECE 81
1	ECE 182	Soph. Lab	F	ECE 33, ECE 121, ECE123
3	Eco 029	Money & Banking	F,S	Eco 1
3	Acct 152	Intro. Managerial Accounting	F,S	Acct 151
3	Math 208		F,S	Math 23 (PC)
4	Comm 160* or 130	Public Speaking for IBE	F,S	
1	IBE 250	IBE Junior Lab	F	IBE 150
19	Semester total			
88	Cumulative credits	* Comm 160 recommended		

**Junior Year, Spring Semester**

Credits	Course	Description	Semester	Prerequisites
3	ECE 125	Circuits & Systems	S	ECE 108
3	Mat 33	Engin. Materials & Proc.	F,S	
3	Mkt 111	Princ. Of Marketing	F,S	Eco 1, Sophomore Standing
3	Fin 125	Intro. to Finance	F,S	Eco 029, Acct 151, Math 231
3	Eco 146	App. Microeconomics	F,S	Eco 1, IE 111 or Math 231
3	IBE 380	IBE Capstone Design	S	IBE 050
18	Semester total			
106	Cumulative credits			

**Senior Year, Fall Semester**

Credits	Course	Description	Semester	Prerequisites
3	ECE 257	Senior Project I	F	Senior Standing
3	Law 201	Legal Env. of Business	F,S	Eco 1, Junior Standing
3	Free Elective			
4	HSS Elective			
3	IBE 385	IBE Capstone Design	F	IBE 380
16	Semester total			
122	Cumulative credits			

**Senior Year, Spring Semester**

Credits	Course	Description	Semester	Prerequisites
2	ECE 258	Senior Project II	F	ECE 257
3	BIS 111	Business Info. Sys.	F,S	Engin. 097
3	Mgmt 243	Mgmt of Organizations	F,S	Eco 1, Junior Standing
4	HSS Elective			
3	Free Elective			
15	Semester total			
137	Cumulative credits			

**(PC) = Previously or Concurrently (Co) = Co-requisite; must be taken at the same time**

**IBE EE majors must also fulfill standard IBE requirements including**

Language proficiency

Summer internship

Maintain a GPA of at least 3.25

**EE Dual Degree Option****Courses required for the BSEE degree not taken by IBE EE Majors:**

Credits	Course	Description	Semester	Prerequisites
3	ECE 202	Intro. Electromagnetics	F	Math 205, Phys 21
3	ECE 203	Intro. Electromagnetic waves	S	ECE 202
3	ECE 136	Electromechanics	F	ECE 81
3	ECE 138	Digital Systems Lab	S	ECE 33
3	App. Tech. Elec.	Phys 31 (or see catalog)		
12	App. Tech. Elec.	ECE/CSE (see catalog)		
3	HSS	see 3 below		
30	Total Credits			

To complete the BSEE Dual degree program, students must

1. Take the above “**Courses required for the BSEE degree not taken by IBE EE Majors**”
2. Complete at least 165 total credits (EE degree requires 135 + 30 credits)
3. Take at least 2 additional credits of Eco in their HSS electives