

ELECTRICAL ENGINEERING

Curriculum Guide effective Fall 2018 ~ North Dakota State University

STUDENT _____

ID # _____

ADVISOR _____

	Fall					Spring				
	Course		Crs	Grade	Gen Ed	Course		Crs	Grade	Gen Ed
Freshman (<27 crs)	CHEM 121	General Chemistry I	3		S	ECE 111[▼]	Intro to ECE	3		
	Wellness Elec		2		W	ENGL 120	College Composition II	3		C
	ECE 173	Intro to Computing	4			MATH 129	Basic Linear Algebra	3		
	ENGL 110	College Composition I	4		C	MATH 166	Calculus II	4		
	MATH 165	Calculus I	4		R	PHYS 251	Univ Physics I	4		S
			17					17		
Sophomore (27-59 crs)	EE 206	Circuit Analysis I/lab	4			COMM 110	Fund Public Speaking	3		C
	MATH 265	Calculus III (w/vectors)	4			ECE 311	Circuit Analysis II/lab	4		
	PHYS 252	Univ Physics II	4		S	MATH 266	Intro Differential Equations	3		
	ECE 275	Digital Design/lab	4			Tech Elective		3		
	Gen Ed Elective	Science Lab	1		L	Gen Ed Elective [‡]		3		A or B
			17					16		
Junior (60 - 89 crs)	ECE 320	Electronics I/lab	3			ECE 341	Random Processes	3		
	ECE 321	Electronics II/lab	2			ECE 401	Design I (capstone)	1		
	ECE 376	Embedded Systems/lab	4			ECE 331	Energy Conversion/lab	4		
	ECE 351	Applied EM/lab	4			Tech Elective		3		
	ENGL	Upper Level Writing*	3		C	ECE 343	Signals & Systems	4		
			16					15		
Senior (90 + crs)	ECE 403	Design II (capstone)	2			ECE 405	Design III (capstone)	3		
	ENGR 402	Engr Ethics/Social Resp	1			ECE Elective		3		
	ECE Elective		3			ECE Elective		3		
	Tech Elective		3			Gen Ed Elective		3		A or B
	Gen Ed Elective [‡]		3		A or B	Tech Elective		3		
			3		A or B					
			15					15		
TOTAL CREDITS								128		

General Education Electives			
Approved courses listed in the registration schedule centerfold.			
Gen Ed	Course	Crs	Grade
A		3	
A		3	
B		3	
B		3	
D ■	(double-count with A or B above)		
G ●	(double-count with A or B above)		
L		1	
W		2	

General Education Categories:

- A - Humanities/Fine Arts
- B - Social/Behavioral Sciences
- C - Communication
- D - Cultural Diversity ■
- F - First-Year Experience
- G - Global Perspectives ●
- L - Co-requisite Lab
- R - Quantitative Reasoning
- S - Science & Technology
- W - Wellness

[‡]Suggested to take either ECON 105, ECON 201, or ECON 202

*Select from ENGL 320, 321, 324 or 459 to satisfy the Upper Level Writing for General Education

[‡]Suggested to take ENGR 312 and ENGR 311

ECE Elective: any didactic ECE 4xx course², (not x93, 494,496)

Tech Elective: ECE 374, any didactic ECE 4xx course², ECE x93 or 494 (max 6 credits total between x93 and 494), ECE 496 (max 3 credits) or any course from accompanying list

[▼]Students must take ECE 111 prior to enrolling in ECE courses listed above in the Junior or Senior year; otherwise, students must take an additional ECE Elective in lieu of ECE 111

Students must earn a "C" or better in ECE 173, ECE 275, EE 206, and all required MATH courses, before enrolling in ECE courses listed above in the Junior or Senior years

¹ Students must have at least a 2.0 GPA in all required EE and ECE courses taken at NDSU, in order to graduate. Elective ECE courses are not included in this GPA requirement.

² See <http://bulletin.ndsu.edu/course-catalog/descriptions/ece/> for the full list of ECE courses.

Electrical Engineering Curriculum Flowchart

