

ELECTRICAL ENGINEERING ~ NORTH DAKOTA STATE UNIVERSITY

Curriculum Guide ~ FALL 2019

Student: _____

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			<input type="checkbox"/> Humanities/Fine Art (A)	<input type="checkbox"/> Humanities/Fine Art (A)
	MATH 165	Calculus I	4		R	ENGL 120	College Composition II	3		C	<input type="checkbox"/> Social/Behavioral Science (B)	<input type="checkbox"/> Social/Behavioral Science (B)
	ECE 173	Intro to Computing	4			PHYS 251	Univ Physics I	4		S	<input type="checkbox"/> Cultural Diversity (D)	<input type="checkbox"/> Global Perspective (G)
	ENGL 110	College Composition I [C]	4		C	MATH 166	Calculus II	4				
	WELLNESS	HDFS 242 OR HNES 100/111/250	2		W	Gen Ed Elective		3		A/B/D/G		
	Science Lab	CHEM 121L, PHYS 251L OR PHYS 252L	1		L							
										Extra Courses	Crs	Grade
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				
	MATH 129	Basic Linear Algebra	3			ECE 275	Digital Design/lab	4				
		Gen Ed Elective		3		A/B/D/G	Tech Elective		3			
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			ECE 343	Signals & Systems	4				
		ENGL		3		C	Gen Ed Elective		3		A/B/D/G	
Senior (90 + crs)	ECE 403	Design II (capstone)	2			ECE 405	Design III (capstone)	3				
	ENGR 402	Engr Ethics/Social Resp	1			Tech Elective		3				
		Gen Ed Elective		3		A/B/D/G	Tech Elective		3			
		Tech Elective		3			ECE Elective		3			
		ECE Elective		3			ECE Elective		3			
										Required Credits to Graduate	128	
										Total Credits Earned	0	
										GPA		

General Education Key:

- A - Humanities/Fine Arts (6 credits)
- B - Social/Behavioral Sciences (6 credits)
- C - Communication (3 credits)
- D - Cultural Diversity (3 credits)
- G - Global Perspectives (3 credits)
- L - Co-Requisite Lab (1 credit)
- R - Quantitative Reasoning (3 or 4 credits)
- S - Science & Technology (3 credits)
- W- Wellness (2 credits)

•Please Note: Global Perspective and Cultural Diversity credits may be double counted with GenEd Electives.

- For Gen Ed requirements, the dept. suggests taking ENGR 312 (satisfies Global Perspectives) and ENGR 311.
- GenEd classes suggested to take ECON 105, ECON 201, or ECON 202
- *Upper level English Requirement: ENGL 320, 321, 324, 459

Key:

- "T" indicates requirement satisfied with transfer course
- "S XX" indicates Spring and XX year student is taking course
- "F XX" indicates Fall and XX year student is taking course
- "Su XX" indicates Summer and XX year student is taking course
- [C] Students with an ACT sub-test score of >=18 or SAT of >= 430 may enroll in ENGL 120. Earning a grade of "C" or better will result in credit for ENGL 110

ECE Requirements

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 & Senior years

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

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

ECE Electives: any didactic ECE 4xx course (excluding x93, 494, 496)

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

MATH Minor: May be achieved by taking 6 credits to include MATH 270 and all 300-400 level MATH courses except MATH 327 and MATH 376

PHYS Minor: PHYS 252L, PHYS 350, plus 7 credits 300-400 level PHYS or PHYS 171, PHYS 251L, PHYS 251R, PHYS 252R, or PHYS 215. ME 221 and 222 may be substituted for PHYS 251 and PHYS 251L