

Itasca Community College/North Dakota State University <u>Electrical Engineering Transfer Guide</u>

Electrical Engineering Program: 128 Credits YEAR: 2019-2020 Effective Spring 2020



ICC students are encouraged to connect with NDSU admission and engineering advisors one full semester prior to transfer Engineering Advisor: Joel.Hanson@ndsu.edu Transfer Recruitment: john.e.hest@ndsu.edu

- ICC students are encouraged to complete their Associates Degree prior to transferring to NDSU. Completing the Associates of Arts (AA) degree, Associates of Science (AS) degree, or the MN Transfer Curriculum prior to transferring will satisfy NDSU's required lower division Gen Ed credits (39 credits) upon transfer.
- Visit <u>www.ndsu.edu/transfer</u>, select "Transfer Resources", then "Transfer Evaluation System (TES)", then navigate to ICC to see ICC/NDSU equivalencies.
- Additional course substitutions may be available. ICC students must meet with NDSU dept advisor to review transfer work.
- Program requirements change periodically. It is the student's responsibility to be in contact with advisors from both institutions to obtain the most current program information to help ensure a smooth transfer.

Electrical Engineering NOTES

• No D's or F's accepted for coursework in the following areas: Biology, Chemistry, Computer Science, Math, Physics, or any ENGR course

English and Communication

Itasca Course	Cr	NDSU Equivalent	Cr	NDSU Gen Ed /NOTES
ENGL 1101 Composition I	4	ENGL 110 College Composition I	4	Communication (C)
ENGL 1113 Composition II	3	ENGL 120 College Composition II	3	Communication (C)
ENGL 1105 Technical Research Writing	3	ENGL 321 Writing in the Technical Prof	3	Communication (C)
SPCH 1105 Fundamentals of Public Speaking	3	COMM 110 Fund of Public Speaking	3	Communication (C)

Math

Itasca Course	Cr	NDSU Equivalent	Cr	NDSU Gen Ed
MATH 1122 Calculus I	4	MATH 165 Calculus I	4	Quantitative Reasoning
MATH 1123 Calculus II	4	MATH 166 Calculus II	4	
MATH 2102 Multivariable Calculus	4	MATH 265 Calculus III	4	Will need to take Math 494 (1 cr)
MATH 2104 Diff Eq/Intro to Linear Algebra	4	MATH 266 Diff Eq	3	Will need to take Math 129 (3 cr)

Chemistry, Physics, Engineering, and Electives

Itasca Course	Cr	NDSU Equivalent	Cr	NDSU Gen Ed/E	lectives
CHEM 1201 General Chemistry I	4	CHEM 121/L General Chemistry I/L	3/1	Science & Techn	ology (S)
PHYS 1201 Gen Physics I	4	PHYS 251 Univ Physics I/L	4/1	Science & Techn	ology (S)
PHYS 1202 Gen Physics II	4	PHYS 252 Univ Physics II/L	4/1	Science & Technology (S)	
ENGR 1115 Digital Logic	3	ECE 275 Digital Systems I	4	(Need 1 cr specia	al topics lab)
ENGR 1220 Intro to Engineering	3	ECE 111 Intro to E & C Engineering	3		
CHEM 1202 General Chemistry II	4	CHEM 122/L General Chemistry II/L	3/1	Tech Elective	
BIOL 1201 General Biology I	4	BIOL 150 General Biology /L	3/1	Tech Elective	
ENGR 2101 Statics	3	ME 221 Engineering Mechanics I	3	Tech Elective	Need
ENGR 2102 Dynamics	3	ME 222 Engineering Mechanics II	3	Tech Elective	only 4
ENGR 2103 Mechanics of Materials	3	ME 223 Mechanics of Materials	3	Tech Elective	courses
ENGR 2104 Fluid Mechanics	3	CE 309 Fluid Mechanics (need CE 310 lab)	3	Tech Elective	courses
ENGR 2105 Thermodynamics	3	ME 351 Thermodynamics (sub for ME 350)	3	Tech Elective	
ENGR 2106 Circuits I	4	EE 206 Circuit Analysis I	4	_	
ENGR 2107 Circuits II	4	ECE 311 Circuit Analysis II/L	4		
ENGR 1232, ENGR 2233, & ENGR 2234	3/3/3	ENGR 402 Ethics	1		
CSCI 1205 C++ Programming	3	ECE 173 Introduction to Engineering	4	(Need 1 cr specia	al topics lab)

Humanities & Fine Arts (A), Social/Behavioral (B) - 6 credits each, and Wellness (W) - 2 credits minimum

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Itasca Course	Cr	NDSU Equivalent	Cr	NDSU Gen Ed
The Humanities & Fine Arts	3	NEED 6 credits in each of the following categories: Humanities & Fine Arts <u>and</u> Social/Behavioral Sciences. Also need a Cultural Diversity (D) <u>and</u> a Global Perspectives (G) designated course. Certain (D) and (G) courses double count for categories (A) or (B). *No more than 3 of the 6 Humanities & the Fine Arts credits may be in fine arts		
The Humanities & Fine Arts	3			
History & the Social/Behavioral Sciences	3			
History & the Social/Behavioral Sciences	3			
		performance.		
PE 1201, HLTH 1201, or HLTH 1202	2/3	HNES 100, HDFS 242, or HNES 200	2/3	Wellness (W)