

Itasca Community College/North Dakota State University <u>Civil & Environmental Engineering Transfer Guide</u>

Civil & Environmental Engineering Program: 133 Credits YEAR: 2017-2018



ICC students are encouraged to connect with NDSU admission and engineering advisors one full semester prior to transfer Transfer Recruitment: Megan.Ehora@ndsu.edu Engineering advisor: Joel.Hanson@ndsu.edu

- NDSU requires 37 credits of lower division general education (Gen Ed) credits
- If an ICC student completes the Associates of Arts (AA) degree or the MN Transfer Curriculum prior to transfer, the 37 lower division Gen Ed credits will be satisfied upon transfer to NDSU
- Students transferring 24+ credits are not required to take UNIV 189
- Visit www.ndsu.edu/transfer, select "Course Equivalencies Database", then navigate to "ICC" to see ICC/NDSU equivalencies

Civil Engineering Program NOTES

• No grades less than "C" accepted in Statics, Dynamics, Mechanics of Materials, and Math courses

English and Communication *An upper-division technical writing course is also required – taken at NDSU

Itasca Course	Cr	NDSU Equivalent	Cr	NDSU Gen Ed
ENGL 1101 Expository Writing	3	ENGL 110 College Composition I	3	Communication (C)
ENGL 1105 or 1113 Technical/Research Writing	3	ENGL 120 College Composition II	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 259 Multivariate Calculus	3	
MATH 2104 Diff Eq/Intro to Linear Algebra	4	MATH 266 and 129* Diff Eq & Linear Alg.	3/3	*substitute MATH 129 for 128

Chemistry, Physics, and Engineering

Itasca Course	Cr	NDSU Equivalent		NDSU Gen Ed/NOTES
CHEM 1201 General Chemistry I	4	CHEM 121/L General Chemistry I/L	3/1	Science & Technology (S)
CHEM 1202 General Chemistry II	4	CHEM 122/L General Chemistry II/L	3/1	Science & Technology (S)
ENGR 1220 and CSCI 1205	3/3	CE 111 Intro Civil Engineering	2	
ENGR 1117 ENGR 1220, ENGR 1232, and ENGR	2/3/3/3	CE 212 CE Graphic Communications	3	
2233				
ENGR 2101 Statics	3	ME 221 Engineering Mechanics I	3	
ENGR 2102 Dynamics	3	ME 222 Engineering Mechanics II	3	
ENGR 2103 Mechanics of Materials	3	ME 223 Mechanics of Materials	3	
ENGR 2104 Fluid Mechanics	3	CE 309 Fluid Mechanics	3	
ENGR 2105 Thermodynamics	3	ME 351* Therm & Heat Transfer	3	*substitute ME 351 for 350
ENGR 1232, ENGR 2233, & ENGR 2234	3/3/3	ENGR 402 Ethics	1	
PHYS 1202 Gen Physics II	4	PHYS 252 Univ Physics II/L	4/1	Science & Technology (S)
NSCI 1121 Earth Science	4	Geology 105/L Physical Geology	3/1	Science & Technology (S) (G)

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

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 and			
The Humanities & Fine Arts	3	Social/Behavioral Sciences. Also need a Cultural Diversity (D) and 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 performance. Students transferring into Civil are required to take either ENGR 311 (A) or ENGR 312 (B/G) regardless of Gen Ed completion.			
History & the Social/Behavioral Sciences	3				
History & the Social/Behavioral Sciences	3				
PE 1201, HLTH 1201, or HLTH 1202	2/3	HNES 100, HDFS 242, or HNES 200 2/3 Wellness (W)			

^{*}Other course substitutions may be available. Transfer students must meet with NDSU department advisor to review transfer work. NOTE: Program requirements change frequently. 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.