



Itasca Community College/North Dakota State University

Manufacturing Engineering Transfer Guide

Manufacturing Engineering Program: 131 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 www.ndsu.edu/transfer, 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.

MANUFACTURING ENGINEERING NOTES

- No D's or F's accepted for Chemistry, Math, or Physics courses

English and Communication

<i>Itasca Course</i>	<i>Cr</i>	<i>NDSU Equivalent</i>	<i>Cr</i>	<i>NDSU Gen Ed /NOTES</i>
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

<i>Itasca Course</i>	<i>Cr</i>	<i>NDSU Equivalent</i>	<i>Cr</i>	<i>NDSU Gen Ed</i>
MATH 1122 Calculus I	4	MATH 165 Calculus I	4	Quantitative Reasoning
MATH 1123 Calculus II	4	MATH 166 Calculus II	4	
MATH 2102 Multivariate Calculus	4	MATH 259 Multivariate Calculus	3	
MATH 2104 Diff Eq/Intro to Linear Algebra	4	MATH 266 Diff Eq & 128 & Intro Linear Alg	3/1	

Chemistry, Physics, and Engineering

<i>Itasca Course</i>	<i>Cr</i>	<i>NDSU Equivalent</i>	<i>Cr</i>	<i>NDSU Gen Ed</i>
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)
PHYS 1202 Gen Physics II	4	PHYS 252 Univ Physics II/L	4/1	Science & Technology (S)
ENGR 1220, 1232 and 2233	3/3/3	ME 212 Visual Communications	3	
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 Thermodynamics (sub for 350)	3	
CSCI 1205	3	ECE 173 Introduction to Computing	4	
ENGR 2106/ ENGR 1115/ ENGR 2106	4/3/4	EE 206/ ECE 275/ ECE 301	4/4/3	Need only 1 of these 3
ENGR 1232, ENGR 2233, & ENGR 2234	3/3/3	ENGR 402 Ethics	1	
ENGR 1220	3	IME 111 Intro to IME	3	
No equivalency		IME 330 Manufacturing Processes	3	Taken at NDSU

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

<i>Itasca Course</i>	<i>Cr</i>	<i>NDSU Equivalent</i>	<i>Cr</i>	<i>NDSU Gen Ed</i>
The Humanities & Fine Arts	3	NEED 6 credits in each of the following categories: Humanities & Fine Arts and 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.		
The Humanities & Fine Arts	3			
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)