

Transfer Planning Worksheet 2025-2026



**NORTH CENTRAL
COLLEGE 1861**

Student Name: _____ North Central ID# _____ College Representative: _____ Date: _____

Computer Engineering, B.S.

Computer Engineering is a blend of computer science and electrical engineering. Our students see a broad spectrum of applications in the areas of computer hardware/software and electronics.

Major Requirements

A minimum of 45 credit hours of Engineering coursework to include:

Core Courses			
Course Name	Equivalent	Credit	Grade
CSCE 160 - Introduction to Computer Programming	CIS 121, CIS 255, CIS 263, or CIS 264 @ TC		
CSCE 210 - Data Structures	CIS 295 @ TC		
CSCE 220 - Computer Organization and Design	CIS 165 @ TC		
CSCE 230 - Discrete Structures	CIS 125 @ TC		
CSCE 306 - Object-Oriented Software Development			
CSCE 320 - Computer Architecture			
CSCE 420 - Operating Systems			
CSCE 494 - Senior Capstone			
Four credit hours of CSCE or INFS electives at or above the 200-level			
ELEC 150 - Introduction to Electrical Engineering			
ELEC 200 - Digital Logic I			
ELEC 250 - Circuit Analysis I			
ELEC 280 - Microcontrollers			
ENGR 100 - Introduction to Engineering			
ENGR 110 - The Engineering Method			
ENGR 120 - Engineering Calculations			
Required Support Courses for the B.S. Degree			
Ethics			
One of the following:			
Course Name	Equivalent	Credit	Grade
PHIL 110 - Ethics	PHL 103 @ TC		
PHIL 210 - Professional Ethics			
Mathematics and Laboratory Science			
A minimum of 30 credit hours of Mathematics and Science coursework to include:			
Mathematics			
Course Name	Equivalent	Credit	Grade
MATH 151 - Calculus I *	MAT 131 @ TC		
MATH 152 - Calculus II	MAT 133 @ TC		
MATH 253 - Calculus III	MAT 235 @ TC		
MATH 255 - Linear Algebra and Differential Equation			
Laboratory Science			
Eight credit hours from the following:			
Course Name	Equivalent	Credit	Grade
BIOL 106 - Introduction to Environmental Science	BIS 105 @ TC		
BIOL 108 - Water, Food and Sex			

BIOL 109 - Genes and Our Genetic Future			
BIOL 195 - Investigating Biology or BIOL 205 - Exploring Biology			
CHEM 121 - General Chemistry I	CHM 140 @ TC		
CHEM 122 - General Chemistry II	CHM 141 @ TC		
CHEM 125 - General Chemistry for Engineers			
PHYS 110 - Astronomy	AST 100 or AST 102 @ TC		
PHYS 161 - Physics I: Mechanics and Heat	PYH 106 @ TC		
PHYS 162 - Physics II: Electromagnetism, Waves and Optics	PHY 107 @ TC		

Statistics/Probability

A minimum of four credit hours from one of the following options:

Option 1

Course Name	Equivalent	Credit	Grade
MATH 340 - Probability			

Option 2

One of the following:

Course Name	Equivalent	Credit	Grade
BUSN 265 – Business and Economics Statistics	BUS 149 or ECO 170 @ TC		
PSYC 250 - Statistics	MAT 170 @ TC		

-AND-

A minimum of two additional credit hours from:

- A course in the Lab Science List
- A mathematics course with a minimum prerequisite of MATH 151

Notes:

*Mathematics and Laboratory Science hours based on ABET criteria:

- CSCE 230 applies to the Mathematics and Science total hours.
- If students do not meet the minimum Mathematics and Science requirements, additional coursework may need to be taken.
- Courses below MATH 151 do not apply to the required credit hours in Mathematics and Science.

**Students who do not place into MATH 151 must successfully complete the course prerequisite, MATH 140.