

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 216, CSC 121, CSC 122, or CSC 214 @ Harper		
CSCE 210 - Data Structures	CSC 216 @ Harper		
CSCE 220 - Computer Organization and Design	CSC 217 @ Harper		
CSCE 230 - Discrete Structures	MTH 220 @ Harper		
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	EGR 110 @ Harper		
ELEC 200 - Digital Logic I	EGR 270 @ Harper		
ELEC 250 - Circuit Analysis I	EGR 265 @ Harper		
ELEC 280 - Microcontrollers			
ENGR 100 - Introduction to Engineering	EGR 100 @ Harper		
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	PHI 115 @ Harper		
PHIL 210 - Professional Ethics	PHI 150 @ Harper		

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 *	MTH 200 @ Harper		
MATH 152 - Calculus II	MTH 201 @ Harper		
MATH 253 - Calculus III	MTH 202 @ Harper		
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	BIO 104 @ Harper		
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 121 @ Harper		
CHEM 122 - General Chemistry II	CHM 122 @ Harper		
CHEM 125 - General Chemistry for Engineers			
PHYS 110 - Astronomy	AST 100 @ Harper		
PHYS 161 - Physics I: Mechanics and Heat	PHY 201 @ Harper		
PHYS 162 - Physics II: Electromagnetism, Waves and Optics	PHY 202 @ Harper		

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	MTH 225 @ Harper		
PSYC 250 - Statistics	MTH 165 @ Harper		

-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.