



# Transfer Planning Worksheet 2020-2021



**NORTH CENTRAL  
COLLEGE 1861**

Student Name: \_\_\_\_\_ North Central ID# \_\_\_\_\_ College Representative: \_\_\_\_\_ Date: \_\_\_\_\_

## Electrical Engineering, B.S.

Electrical Engineering offers a mix of circuit design, software development, communication systems and power electronics. Our graduates are well prepared for employment in a wide range of companies and research labs.

## 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 2485, CIS 2531, CIS 2541, CIS 2571, or CIS 2572 @ COD		
CSCE 220 - Computer Organization and Design	CIS 2420 or CIS 2430 @ COD		
ELEC 150 - Introduction to Electrical Engineering			
ELEC 200 - Digital Logic I	ENGI 2213 @ COD		
ELEC 250 - Circuit Analysis I	ENGI 2210 or ENGI 2220 @ COD		
ELEC 251 - Circuit Analysis II			
ELEC 280 - Microcontrollers	ENGI 2223 @ COD		
ELEC 310 - Analog and Digital Signals			
ELEC 330 - Motors and Actuators			
ELEC 460 - Electronic Controls			
ENGR 100 - Introduction to Engineering			
ENGR 110 - The Engineering Method			
ENGR 120 - Engineering Calculations			
ENGR 400 - Independent Project I			
ENGR 450 - Capstone I			

## Required Support Courses for the B.S. Degree

A minimum of 30 credit hours of Mathematics and Science coursework to include:

Course Name	Equivalent	Credit	Grade
MATH 151 - Calculus I *	MATH 2231 @ COD		
MATH 152 - Calculus II	MATH 2232 @ COD		
MATH 253 - Calculus III	MATH 2233 @ COD		
MATH 255 - Linear Algebra and Differential Equation			
PHYS 161 - Physics I: Mechanics and Heat	PHYS 2111 @ COD		
PHYS 162 - Physics II: Electromagnetism, Waves and Optics	PHYS 2112 @ COD		
PHYS 263 - Physics III: Quantum Physics			
PHYS 320 - Physics of Solids			

## Notes:

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.