

## UNIVERSITY OF NORTH DAKOTA AU-ABC - PROGRAM PLAN

Degree: Bachelor of Science in Electrical Engineering

**Purpose of degree:** The Bachelor of Science in Electrical Engineering degree provides students with a strong foundation in the traditional and contemporary areas of electrical engineering, and helps its graduates learn the leadership, communication, multidisciplinary teamwork, entrepreneurial, and life-long learning skills necessary for success in a global marketplace.

Degree breakdown: The Bachelor of Science in Electrical Engineering at the University of North Dakota requires:

- 125 total credits
  - 30 credits must be taken at UND
  - 36 credits must be upper-division (300-level or higher)
- Essential Studies Requirements
  - Receive Breadth of Knowledge waiver
  - Special Emphasis requirements
- Curriculum approved by the College of Engineering & Mines

## Questions?

Visit <a href="http://engineering.und.edu/electrical/undergraduate/index.cfm">http://engineering.und.edu/electrical/undergraduate/index.cfm</a> for more details on the Bachelor of Science in Electrical Engineering degree.

For assistance on how to apply contact:

Veteran & Military Services

701.777.3363

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## Program Plan File (PPF): Bachelor of Science in Electrical Engineering

Category: 3

University of North Dakota | Effective Date: January 1, 2021

Degree Requirements	Required Semester Credits	CCAF Transfer Credits	UND Course Credits
Core/Area of Focus	93	8**	85
CHEM 121 General Chemistry I & Lab	4	4 <sup>1 2</sup>	
EE101 Introduction to Electrical Engineering	1	1 <sup>1</sup>	
EE 201/EE 201L Introduction to Digital Electronics & Lab	3		3
EE 206/EE 206L Circuit Analysis & Lab	4		4
EE 304 Computer Aided Measurement and Controls	3	3 <sup>1 2</sup>	
EE 313/EE 313L Linear Circuits & Lab	4		4
EE 314/EE 314L Signals and Systems & Lab	4		4
EE 316 Electric and Magnetic Fields	3		3
EE 318 Engineering Data Analysis	3		3
EE 321/EE 321L Electronics I & Lab	4		4
EE 401/EE 401L Electric Drives & Lab	4		4
EE 405/EE 405L Control Systems I & Lab	4		4
EE 409 Distributed Networks	3		3
EE 421/EE 421L Electronics II & Lab	4		4
EE 452/EE 452L Embedded Systems & Lab	4		4
EE 480 Senior Design I	3		3
EE 481 Senior Design II	3		3
ENGR 460 Engineering Economy	3		3
ENGR 340 Professional Integrity in Engineering	3		3
MATH 107 Precalculus	4		4
MATH 165 Calculus I	4		4
MATH 166 Calculus II	4		4
MATH 207 Introduction to Linear Algebra	2		2
MATH 265 Calculus III	4		4
MATH 266 Elementary Differential Equations	3		3
PHYS 251 University Physics I & Lab	4		4
PHYS 252 University Physics II & Lab	4		4



Electives	32	14	18
Electrical Engineering Elective	12		12
Non-EE Elective	6	6	
Diversity of Human Experience (D) Special Emphasis course for Essential Studies*	3		3
Analyzing Worldview (W) Special Emphasis course for Essential Studies*	3		3
Electives to fulfill 125 required credits	8	8	
Total Credits Required  Bachelor of Science in Electrical Engineering	125	22**	103

<sup>&</sup>lt;sup>1</sup> Awarded for degrees in Mechanical & Electrical Technology (4VGA)

<sup>&</sup>lt;sup>2</sup> Awarded for degrees in Bioenvironmental Engineering Technology (7GAM)

<sup>\*</sup> student should work with advisor to select courses that will fulfill Essential Studies requirements

<sup>\*\*</sup> number of credits awarded based on CCAF AAS degree