

# Electrical Engineering and Physics

## Department Information

- **Department Web Site:**  
www.ndsu.edu/ece/ (<http://www.ndsu.edu/ece/>)
- **Credential Offered:**  
B.S.E.E.
- **Official Program Curriculum:**  
[catalog.ndsu.edu/undergraduate/program-curriculum/electrical-engineering-physics/](http://catalog.ndsu.edu/undergraduate/program-curriculum/electrical-engineering-physics/) (<http://catalog.ndsu.edu/undergraduate/program-curriculum/electrical-engineering-physics/>)

This dual major option will appeal to students with broad interests in both fundamental physics science and applied engineering methods. Graduates, equipped with analytical problem-solving skills and technical knowledge, will be well prepared to pursue careers in a wide range of fields within industry, government, and higher education. Students will earn one degree, a Bachelor of Science in Electrical Engineering (B.S.E.E.) degree, with this dual major.

## Sample Program Guide

IMPORTANT DISCLAIMER: A Sample Program Guide provides an unofficial guide of program requirements and should be used by prospective students who are considering attending NDSU in the future. It is NOT an official curriculum and should NOT be used by current NDSU students for official degree planning purposes. Note that the official curriculum used by current NDSU students can vary from the Sample Program Guide due to a variety of factors such as, but not limited to, start year, education goals, transfer credit, and course availability.

To ensure proper program completion, enrolled students should utilize Degree Map (<https://www.ndsu.edu/registrar/degreemap/>) and Schedule Planner (<https://www.ndsu.edu/onestop/degree-map-and-planning/>) in Campus Connection and consult regularly with their academic advisor to ensure requirements are being met.

Freshman			
Fall	Credits	Spring	Credits
COMM 110		3 ECE 111	3
ENGL 110		3 ENGL 120	3
PHYS 171 <sup>1</sup>		1 MATH 129 <sup>1</sup>	3
ECE 173 <sup>1</sup>		4 MATH 166 <sup>1</sup>	4
MATH 165 <sup>1</sup>		4 PHYS 251 & 251L <sup>1</sup>	5
Gen Ed Wellness		2	
		<b>17</b>	<b>18</b>
Sophomore			
Fall	Credits	Spring	Credits
EE 206 <sup>1</sup>		4 PHYS 370 <sup>1</sup>	3
MATH 265 <sup>1</sup>		4 ECE 311	4
ECE 275 <sup>1</sup>		4 MATH 266 <sup>1</sup>	3
PHYS 252 & 252L <sup>1</sup>		5 PHYS 350 <sup>1</sup>	3
		Gen Ed Humanities/Fine Arts and Cultural Diversity	3
		<b>17</b>	<b>16</b>
Junior			
Fall	Credits	Spring	Credits
ECE 320		3 ECE 331	4
ECE 321		2 ECE 343	4
PHYS 355 <sup>1</sup>		3 ECE 351	4

PHYS 360 <sup>1</sup>	3	ECE 376	4
PHYS 462 <sup>1</sup>	3	ECE 401	1
ENGL 320, 321, 324, or 459	3		
	<b>17</b>		<b>17</b>

<b>Senior</b>			
<b>Fall</b>	<b>Credits</b>	<b>Spring</b>	<b>Credits</b>
ECE 341		3 ECE 405	3
ECE 403		2 ECE Elective	3
ENGR 327		3 ECE Elective	3
PHYS 485 <sup>1</sup>		3 Gen Ed Social & Behavioral Sciences and Global Perspectives	3
PHYS Elective (PHYS 215, 481, 486 or 489) <sup>1</sup>		3 Gen Ed Social & Behavioral Sciences	3
ECE/PHYS Elective (PHYS 411/L, PHYS 413, or PHYS 415) <sup>1</sup>		3	
		<b>17</b>	<b>15</b>

**Total Credits: 134**

**Degree Notes:**

<sup>1</sup> require a grade of C or higher.