

# Computer Engineering

## Department Information

- **Department Location:**  
101 Electrical and Computer Engineering Bldg.
- **Department Phone:**  
701-231-7019
- **Department Web Site:**  
[www.ndsu.edu/ece/](http://www.ndsu.edu/ece/) (<http://www.ndsu.edu/ece/>)
- **Credential Offered:**  
B.S.Cpr.E.
- **Official Program Curriculum:**  
[catalog.ndsu.edu/undergraduate/program-curriculum/computer-engineering/](http://catalog.ndsu.edu/undergraduate/program-curriculum/computer-engineering/) (<http://catalog.ndsu.edu/undergraduate/program-curriculum/computer-engineering/>)

## 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
CHEM 121		3 ENGL 120	3
ENGL 110		3 MATH 166	4
CSCI 160		4 PHYS 251	4
MATH 165		4 CSCI 161	4
ECE 111		3 CHEM 121L/PHYS 251L/ PHYS 252L (Fulfills Gen Ed Sci/Tech Co-Req Lab)	1
		<b>17</b>	<b>16</b>
Sophomore			
Fall	Credits	Spring	Credits
EE 206		4 COMM 110	3
MATH 265		4 ECE 320	3
ECE 275		4 MATH 266	3
MATH 129		3 ECE 374	4
Wellness Gen Ed		2 CSCI 222	3
		<b>17</b>	<b>16</b>
Junior			
Fall	Credits	Spring	Credits
ECE 341		3 ECE 343	4
ENGR 327 (Fulfills Gen Ed Humanities & Fine Arts (A))		3 ECE 375	3
CPE Core <sup>5</sup>		3 ECE 376	4
CPE Core <sup>5</sup>		3 ECE 401	1

CPE Core <sup>5</sup>		3 CPE Core <sup>5</sup>	3
		Humanities/Fine Arts Gen Ed Elective	3
		<b>15</b>	<b>18</b>
<b>Senior</b>			
<b>Fall</b>	<b>Credits</b>	<b>Spring</b>	<b>Credits</b>
ECE 403		2 ECE 405	3
ENGL/Upper Level Writing <sup>2</sup>		3 ECE Elective	3
ECE Elective		3 ECE Elective	3
Tech Elective		3 Social/Behavioral Sci. and Cultural Diversity	3
Social/Behavioral Sci. and Global Perspectives		3 Tech Elective	3
Humanities/Fine Arts Gen Ed		3	
		<b>17</b>	<b>15</b>

**Total Credits: 131**

- <sup>1</sup> Students must take ECE 111 prior to enrolling in ECE courses listed above in the Junior or Senior years; otherwise, students must take an additional ECE Elective in lieu of ECE 111.
- <sup>2</sup> Select from ENGL 320, 321, 324 or 459 to satisfy the Upper Level Writing for General Education.
- <sup>3</sup> Suggested to take ENGR 311.
- <sup>4</sup> Suggested to take ENGR 312, ECON 105, ECON 201 or ECON 202..
- <sup>5</sup> ECE 474, ECE 423, Embedded Machine Learning (new ECE course), CSCI 474, CSCI 467 (Algorithm Analysis), ECE 425

**PROGRAM NOTES:**

**ECE Elective:** any didactic ECE 4xx course (not x93, 494, 496).

**Tech Elective:** See department for course listings

Students must earn a "C" or better in ECE 173, ECE 275, EE 206 and all required MATH courses, before enrolling in ECE courses listed above in the Junior or Senior years.