

ELECTRICAL ENGINEERING, CO-OP OPTION, BS

Bachelor of Science in Electrical Engineering (with Co-op, 44005BS)

This option of the undergraduate program in Electrical Engineering includes a cooperative education component.

The following information has official approval of the **Department of Electrical and Computer Engineering** and **The College of Engineering**, but is intended only as a supplemental guide. Official degree requirements are established at the time of transfer and admission to the degree-granting college. Students should refer to the Degree Progress Report (DPR) which is definitive for graduation requirements. *Completion of this degree within the identified time frame below is contingent upon many factors, including but not limited to: class availability, total number of required credits, work schedule, finances, family, course drops/withdrawals, successfully passing courses, prerequisites, among others.* The transfer process is completed through an appointment with your academic advisor.

1st Year

Fall Semester		Hours
3150:151	Principles of Chemistry I ¹	3
3150:152	Principles of Chemistry I Laboratory	1
3300:111	English Composition I ^{1,2}	3
3450:221	Analytic Geometry-Calculus I ¹	4
4400:101	Tools for Electrical Engineering	3
Hours		14

Spring Semester

3300:112	English Composition II ^{1,5}	3
3450:222	Analytic Geometry-Calculus II ¹	4
3650:291	Elementary Classical Physics I ¹	4
4450:220	Digital Logic Design	4
General Education or Honors Distribution ⁴		3
Hours		18

2nd Year

Fall Semester		Hours
3450:223	Analytic Geometry-Calculus III ¹	4
3650:292	Elementary Classical Physics II ¹	4
4400:230	Circuits I Laboratory	1
4400:231	Circuits I	3
General Education or Honors Distribution ⁴		3
General Education or Honors Distribution ⁴		3
Hours		18

Spring Semester

3450:335	Introduction to Ordinary Differential Equations	3
4300:201	Statics	3
4400:330	Circuits II Laboratory	1
4400:332	Circuits II	3
4450:208	Programming for Engineers	3

General Education or Honors Distribution ⁴		3
Hours		16

Summer Semester

4100:300	Cooperative Education Work Period (Possible)	0
Hours		0

3rd Year

Fall Semester

4300:202 or 4600:203	Introduction to Mechanics of Solids or Dynamics	3
4400:340	Signals & Systems	4
4400:353	Electromagnetics I	4
4400:360	Physical Electronics	3
4400:381	Energy Conversion	4
4400:301	Undergraduate Research I: Electrical Engineering (Optional)	
Hours		18

Spring Semester

4100:301	Cooperative Education Work Period	0
Hours		0

Summer Semester

3470:401	Probability and Statistics for Engineers	2
4200:305 or 4600:305	Materials Science or Thermal Science	2
4400:302	Undergraduate Research II: Electrical Engineering (Optional)	
Hours		4

4th Year

Fall Semester

4100:302	Cooperative Education Work Period	0
Hours		0

Spring Semester

4450:309	Design Project Seminar - Computer Engineering	1
4400:341	Introduction to Communication Systems	3
4400:354	Electromagnetics II	3
4400:361	Electronic Design	4
4400:371	Control Systems I	4
4400:303	Undergraduate Research III: Electrical Engineering (Optional)	
Hours		15

Summer Semester

4100:403	Cooperative Education Work Period	0
Hours		0

5th Year

Fall Semester

4400:401	Senior Design Project I - Electrical Engineering	2
Electrical Engineering Elective		3
Electrical Engineering Elective		3
Electrical Engineering Elective		3
General Education or Honors Distribution ⁴		3
Hours		14

Spring Semester

4400:402	Senior Design Project II - Electrical Engineering	3
	Electrical Engineering Elective	3
	Electrical Engineering Elective	3
	Electrical Engineering Elective	3
	General Education or Honors Distribution ⁴	3
	General Electives	5
	Hours	20
	Total Hours	137

- ¹ Honors sections may be available; check the schedule of classes.
- ² The Electrical and Computer Engineering Department recommends that English Composition I be used to satisfy writing course requirement but other choices are available. See the General Education Program for details.
- ³ Check General Education Program or Honors Distribution to find courses that satisfy the second writing course requirement.
- ⁴ Credit hours shown for General Education or Honors Distribution are general guidelines only. These courses should be chosen in accordance with the appropriate General Education curriculum guide (for non-honors students) or Honors Distribution (for honors students). Honors students must also ensure that their course selections meet additional requirements not shown on this curriculum guide.
- ⁵ While 3300:112 English Composition II is preferred, 2020:222 Technical Report Writing is accepted to fulfill the English composition elective.

Notes:

- Up to three credits of undergraduate research in Electrical Engineering may be applied to program requirements as Electrical Engineering Electives. Students may take at most one credit of undergraduate research in a semester.
- See Electrical and Computer Engineering Departmental Office for Approved Electrical Engineering Electives (including Breadth and Depth requirements)