

**Department of Electrical and Computer Engineering  
Computer Engineering Curriculum**

**Summary of Degree Requirements**

February 2018

**128 Hours Total**

<b>A. Required Classes</b>	<b>68 Hours</b>
<b>B. Probability and Statistics*</b>	<b>3 Hours</b>
<b>C. Technical Electives</b>	<b>27 Hours</b>
<b>D. Liberal Educ./General Education</b>	<b>18 Hours</b>
<b>E. Free Electives</b>	<b>12 Hours</b>
<b>Total</b>	<b>128 Hours</b>

\* Probability and Statistics: Choose from ECE 313 or STAT 410.

**Minimum GPA requirements:**     **2.00 Cumulative Illinois grades**  
   **2.00 ECE classes (TGPA)**  
   **2.00 Semester**

**Probation and Drop Rules**

Probation Rule	Why you are on probation	To avoid being dropped	Drop Rule
	Semester GPA < 1.0 drop, no probation (except Freshmen, 1 <sup>st</sup> semester)	Not possible	17
1A	Semester GPA < 2.0 Cumulative GPA > 2.0	Sem. GPA > 2.0 next semester	17
1B	1.75 < Cumulative GPA < 2.0	Sem. GPA > 2.25 next semester	17
1C	Cumulative GPA < 1.75	Sem. GPA > 2.33 next semester	17
1 E, 1G or 1H	Dean's Prerogative "almost dropped, last chance"	Sem. GPA > (value) next semester	18
1T	ECE GPA (TGPA) < 2.0	Bring TGPA > 2.0 next semester	18
1P	Departmental probation	Meet specified conditions	18

**Junior Eligibility Rule**

2.25 Rule	This is not a probation rule. However, you may not register for ECE 313, 329, 385, 440, etc.	Retake 2.25 Rule courses to bring their average over 2.25.	None
-----------	--	--	------

# Computer Engineering Work Sheet

(See requirement details on following pages)

September 2017

This Semester	Hrs
Total	

Next Semester	Hrs
Total	

How Many Hours Do I Have Left?					
Total Hours Required per Category					
A	B	C	D	E	Total
68	3	27	18	12	128
Hours Left (after current semester): (See DARS degree audit online)					
Next Semester Hours per Category					
New Totals Left per Category					

**A. Required Classes**  
Check list on next pages

**B. Probabilities and Statistics**  
Choose ECE 313 or STAT 410

<b>C. Tech Electives</b>	Tech Elective Hours	EE Core courses
Courses		
Your Totals		
Required	27 hrs	3 crs

D. Liberal Education/General Education Requirements							
List your courses here:	Campus-Wide Requirements						College of Eng.
	Comp II (course)	Soc. Sci. (hours)	Hum. (hours)	Western (course)	Non-Western (course)	Language (course)	Soc. Sci. or Hum. (hours)
Your Totals							
Required	1 crs	6 hrs	6 hrs	1 crs	1 crs.	3 crs*	18 hrs

**E. Free Electives**  
6 hours must be taken for a grade. Rules for credit: almost anything (see ECE website).

(\*) Students must take 3 semesters of one college level language or 3 years of one high school level language. Approval needed to count for Lib Ed hours (COE).

# Computer Engineering Curriculum

Note: these rules do not apply to the Electrical Engineering major

September 2017

## **A. Required Courses (68 hours)**

### **Core Courses Counted for the 2.25 Rule**

(You need a 2.25 average in the courses through ECE 210 to register for third year ECE courses)

#### Physics

PHYS 211	4 hours	___
PHYS 212	4 hours	___
PHYS 213	2 hours	___
PHYS 214	2 hours	___

#### Math

MATH 221*	4 hours	___
MATH 231	3 hours	___
MATH 241	4 hours	___
MATH 286	4 hours	___

#### Computer Science

CS 173	3 hours	___ (ECE 220 required)
or Math 213		

#### ECE

ECE 110	3 hours	___
ECE 120	4 hours	___
ECE 220	4 hours	___
ECE 210	4 hours	___

### **Chemistry and Rhetoric Courses and Eng 100**

Chem 102/103	4 hours	___
Rhet 105	4 hours	___
Eng 100	0 hours	___

### **Upperclass ECE Courses**

ECE 385	3 hours	___
ECE 391	4 hours	___
ECE/CS 374	4 hours	___

### **Upperclass Computer Science**

CS 225	4 hours	___
--------	---------	-----

\*Math 220, 5 hours, if no high school calculus.

## **B. Probability and Statistics (3 hours)**

ECE 313

or STAT 410 / MATH 464, 3 hours \_\_\_\_.

## **C. Computer Engineering Technical Electives (27 hours)**

Hours	Requirements
27 to include at least:	Selected from the departmentally approved List of Technical Electives
1 course	<b>1 of the 6 EE Foundation Courses:</b> Each student must take one course from the technical elective list.
3 courses	Three of the Advanced Computing Core courses
1 course	<b>Final Design Class:</b> ECE 411 – Computer Organization & Design ECE 445 – Senior Design Project Lab ECE 496 – Senior Research Project and ECE 499 – Senior Thesis
27 Hours Total	

All courses **cross-listed** with ECE courses are counted as ECE hours. Cross-listed means the courses are the same in different departments. GE 421 Intro to Robotics is the “same as” ECE 470, so it counts as an ECE tech elective. In CS 241 it says “Credit is not given for both CS 241 and ECE 391. They are not the same course; you won’t get any credit for CS 241.

### **Restrictions and Notes:**

1. ECE/PHIL 316, Engineering Ethics, is a Campus Humanities course, which meets Comp II requirements. It will not count as an ECE Elective.
2. Some sections of ECE 199, 398, and 498 may not have technical content. These sections will not count as ECE electives.
3. Specifically required ECE courses (e.g., ECE 313) do not count.
4. Courses for non-majors (e.g., ECE 205) do not count unless approved.
5. Students may use independent study and project hours: ECE 397 (Individual Study in ECE), ECE 396 (Honors Project), and ECE 496/499 (Senior Research Project and Thesis).  
**However**, no student may take more than 4 hours special problems with the same instructor, nor count more than a total of 6 hours towards graduation as a technical elective or a required advanced ECE course or lab, regardless of the department in which they are taken.
6. ECE 297 can be repeated for up to 2 hours of ECE technical electives, but does not count as part of the 6 hours of independent study allowed for Technical Electives.
7. **Non-ECE tech elective hours:**  
ENG 491 Interdisciplinary Design Project, approved sections. For ECE credit, go to 2120 ECEB.