

## Transfer Plans

### EE, EP, EE & Society 2016-2017

**PLEASE NOTE:** All courses used to satisfy major requirements must be taken for a **LETTER GRADE**. These plans assume that students have completed equivalent lower division MATH, PHYS and CHEM courses at the community college that are required for the major. Due to six different college requirements, only major requirements are listed.

ELECTRICAL ENGINEERING (B.S.)			
	FALL	WINTER	SPRING
Year 1	ECE 15	ECE 45	ECE 30
	ECE 25	MATH 20E	ECE 65
	ECE 35	PHYS 2D	ECE 109
Year 2	ECE 100	ECE 102	Depth #1
	ECE 101	ECE 107	Elective #2
	ECE 103	Elective #1	Elective #3
Year 3	Depth #2	Depth #4	Depth #5
	Depth #3	Eng. Design	Elective #6
	Elective #4	Elective #5	Elective #7

**DEPTH SEQUENCES:**

Communication Systems: ECE 153, ECE 154A, ECE 154B, ECE 154C, and ECE 158A

**Students must select an upper division ECE course to satisfy the 5th Depth course in the following sequences:**

Electronics Circuits & Systems: ECE 163, 164, 165, 166  
 Electronic Devices & Materials: ECE135A, ECE 135B, ECE 136L, ECE 183  
 Machine Learning & Controls: ECE 171A, ECE 174, ECE 175A, one of ECE 171B, ECE 172A, or ECE175B  
 Photonics: ECE 181, ECE 182, ECE 183 and either ECE 184 or ECE 185  
 Signal and Image Processing: ECE 153, ECE 161A, ECE 161B, ECE 161C  
 Computer System Design: CSE 141, ECE 165 and any two of ECE 118, ECE 158A, ECE 111 or CSE 143

## MAJOR REQUIREMENTS

### Lower Division Requirements

- CHEM 6A (General Chemistry I)
- MATH 20A (Calculus I)
- MATH 20B (Calculus II)
- MATH 20C (Calculus III)
- MATH 20D (Differential Equations)
- MATH 20E (Vector Calculus)
- MATH 18 (Linear Algebra)
- PHYS 2A (Mechanics)
- PHYS 2B (Electricity and Magnetism)
- PHYS 2C (Flu,Wav,Thrmdyn,Optics)
- PHYS 2D (Relativity & Quantum)

EP Majors only:  PHYS 2DL

- ECE 15 (Engineering Computation)
- ECE 25 (Intro to Digital Design)
- ECE 30 (Intro to Computer Eng)
- ECE 35 (Intro to Analog Design)
- ECE 45 (Circuits & Systems)
- ECE 65 (Components & Circuits Lab)

EE & Society Majors only:  
 2 courses in Social Sciences/Humanities

- \_\_\_\_\_
- \_\_\_\_\_

### Upper Division Requirements

- ECE 100 (Linear Electronic Systems)
- ECE 101 (Linear Systems Fundamentals)
- ECE 102 (Intro Active Circuit Design)
- ECE 103 (Fundamentals/Devs & MatrIs)
- ECE 107 (Electromagnetism)
- ECE 109 (Eng. Probability & Stats)

**DEPTHS:**

EE Majors: 5 courses

- \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_

EP Majors: 7 courses

- MATH 110A  PHYS 110A  PHYS 130A  PHYS 130B  PHYS 140A
- \_\_\_\_\_  \_\_\_\_\_

EE & Society Majors: 6 courses

- \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_

Design Course: ECE 111, 118, 191, or 190

**Electives:**

- EE Majors: 3 Professional  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_  
 and 4 Technical  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_

- EP Majors: 3 Professional  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_  
 and 2 Technical  \_\_\_\_\_  \_\_\_\_\_

- EE & Society Majors: 4 Technical  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_

**PLEASE NOTE:** All courses used to satisfy major requirements must be taken for a LETTER GRADE. These plans assume that students have completed equivalent lower division MATH, PHYS and CHEM courses at the community college that are required for the major. Due to six different college requirements, only major requirements are listed.

ENGINEERING PHYSICS (B.S.)			
	FALL	WINTER	SPRING
Year 1	ECE 15	ECE 45	ECE 30
	ECE 25	MATH 20E	ECE 65
	ECE 35	PHYS 2D & 2DL	ECE 107
Year 2	ECE 100	ECE 102	ECE 109
	ECE 101	ECE 103	PHYS 130A
	PHYS 110A	MATH 110A	Elective #1
Year 3	Depth #1*	Depth #2*	Elective #3
	PHYS 130B	Eng. Design	Elective #4
	PHYS 140A	Elective #2	Elective #5

ELECTRICAL ENGINEERING AND SOCIETY (B.A.)			
	FALL	WINTER	SPRING
Year 1	ECE 15	ECE 45	ECE 30
	ECE 25	MATH 20E	ECE 65
	ECE 35	PHYS 2D S/H Elective	S/H Elective
Year 2	ECE 100	ECE 102	Depth #1
	ECE 101	ECE 107	Depth #2
	ECE 103	ECE 109	E. Elective
Year 3	Depth #3	Depth #5	Depth #6
	Depth #4	Eng. Design	E. Elective
	E. Elective	E. Elective	

**Please Note:**

PHYS 2DL and PHYS 130A have prerequisites that are not listed above. PHYS 2DL requires PHYS 2BL or 2CL. PHYS 130A requires 100B and 110A. PHYS 100B requires PHYS 100A, 105A and MATH 18. The upper division prerequisites can be applied towards elective requirements.

\* ECE 123 & 166 or ECE 135A & 135B or ECE 182 & (181 or 183):

The 2 depth courses indicated \* are not always offered in fall and winter, consult with the ECE Undergraduate Office for more detailed information or visit our website.