

- Minimum of 12 units (Plan I) or 16 units (Plan II) must be 201+ ECE courses that must count towards your degree.
- All courses counted towards the degree must be taken for a letter grade and for **4 units**, with the exception of research units.
- Students **CANNOT** repeat a course unless they earned a D, F, or U grade. If you'd like to repeat a course, please submit the [online form](#). More information about how to repeat a course can be found [here](#).
- Must meet the Academic Residency requirement. More detailed info can be found [here](#).

**Core Courses (12 Units)**

ECE 240A	Lasers and Optics
ECE 240B	Optical Information Processing
ECE 240C	Optical Modulation and Detection

Quarter/Core Courses	
	ECE 240A
	ECE 240B
	ECE 240C
<b>Total: 12 Units</b>	

**12 Additional Units Selected from the following**

ECE 212CN	Nanophotonics
ECE 222B-C	Applied Electromagnetic Theory – Electromagnetics & Computational Methods for Electromagnetics
ECE 236B	Optical Processes in Semiconductors
ECE 241A-B-C	Nonlinear Optics, Integrated Photonics, Holographic Optical Elements
ECE 243B	Optical Fiber Communication
ECE 244A	Statistical Optics
ECE 247A*	Advanced BioPhotonics

Quarter/Add. Courses	
<b>Total: 12 Units</b>	

\*Students may take BENG 247A/NANO 247A in place of ECE 247A. May only receive credit for one of these courses towards their degree.

**Technical Electives (24 Units)**

- Any 4 unit, 200+ course from ECE, CSE, MAE, BENG, CENG, NANO, SE, MATS, MATH, PHYS or COGS taken for a letter grade may be counted.
    - \*Exceptions to this list require ECE Department approval.
  - Up to 12 units of undergraduate ECE coursework (ECE 111+ only\*\*) OR up to two 4-unit courses of undergraduate ECE coursework (ECE 111+ only\*\*) and one 4-unit course of CSE undergraduate coursework (CSE 100+ only\*\*\*) may be counted.
  - M.S. students (Plan II) are allowed no more than 4 units of research as technical electives. Ph.D. and M.S. students (Plan I) are allowed no more than 8 units of research as technical electives.
    - The following research course(s) could be used toward the degree:
      - ECE 299, CSE 298/299, MAE 299, MATS 299, BENG 299, NANO 299, SE 299
  - Seminar courses cannot count towards your degree
- \*\* Not including ECE 195, 197, 198, 199, 210 or 298  
 \*\*\* Not including CSE 123, 140, 140L or 143

Quarter/Tech. Electives	
<b>Total: 24 Units</b>	

**Curriculum Advisor**

EC81 Advisor: Shayan Mookherjea  
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Curriculum Advisor Role: Advises graduate students regarding course selection; considers any exception requests requiring faculty approval; signs forms; provides technical engineering related questions and job advice. **PLEASE CONTACT [YOUR STAFF ADVISOR](#) FOR ALL OTHER ISSUES.**