

- ❖ 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 (16 Units)

ECE 251A*	Digital Signal Processing I
ECE 251C	Filter Banks & Wavelets
ECE 253	Fundamentals of Digital Image Processing
ECE 269	Linear Algebra & Application

*Curriculum Advisor strongly recommends completing ECE 251A in your first year, as it's foundational to your major. No course substitutions will be allowed.

Quarter (List FA##, WI##, SP## below)	Core Courses
	ECE 251A
	ECE 251C
	ECE 253
	ECE 269
Total: 16 Units	

12 Additional Units Selected from the following

ECE 204	Statistical Learning in Bioinformatics
ECE 208	Computational Evolutionary Biology
ECE 209	Statistical Learning for Biosignal Processing
ECE 228	Machine Learning for Physical Applications
ECE 250	Random Processes
ECE 251B, D	Digital Signal Processing II, Array Processing
ECE 252A-B	Speech Compression, Speech Recognition
ECE 254	Detection Theory
ECE 255A-B	Information Theory, Source Coding
ECE 257A	Modern Communication Networks
ECE 271A-B-C	Statistical Learning I & II, Deep Learning and Applications
ECE 273	Convex Optimization and Applications
ECE 275A-B	Parameter Estimation I & II
ECE 277	GPU Programming

*ECE 250 is recommended for Ph.D. students

Quarter (List FA##, WI##, SP## below)	Additional Units
Total: 12 Units	

Quarter (List FA##, WI##, SP## below)	Technical Electives
Total: 20 Units	

Technical Electives (20 Units)

- ❖ Any 4 units, 200+ course from ECE taken for a letter grade may be counted.
- ❖ Up to 4 units, 200+ course from CSE, DSC, MAE, BENG, CENG, NANO, SE, MATS, MATH, PHYS or CogSci taken for a letter grade may be counted.* Exceptions to this list require departmental approval.
- ❖ Up to 12 units of undergraduate ECE coursework (ECE 111+ only**) OR up to two 4-unit course 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 units 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 293/298/299, MAE 299, BENG 299, NANO 299, SE 299, DSC 299.

* Seminar courses cannot count towards the degree

** Not including ECE courses numbered: 195, 197, 198, 199, 210 or 298

*** Not including CSE courses numbered: 123, 140, 140L, 143 or 294

Curriculum Advisor

[EC82 Advisor Contact Information](#)

Role: Advises graduate students regarding course selection; Considers any exception requests requiring faculty approval; Signs forms; Technical engineering related questions & job advice.

PLEASE CONTACT [YOUR STAFF ADVISOR](#) FOR ALL OTHER ISSUES.