

2024 - 2025 <u>ECE M.S. / Ph.D. Degree Planner:</u> Signal & Image Processing (EC82)

- 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 <u>online</u> form. More information about how to repeat a course can be found <u>here</u>.
- 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

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

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 unit, 200+ course from ECE, 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 your degree
- ** Not including ECE 195, 197, 198, 199, 210 or 298
- *** Not including CSE 123, 140, 140L, or 143

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.