

## M.S. / Ph.D. Degree Planner: Signal Imaging & Processing (EC82) 2020-2021

- ❖ Minimum of 12 units (Plan I) or 14 units (Plan II) must be 201+ ECE courses that must count towards your degree.
- ❖ Students **CANNOT** repeat a course unless they earned a D, F, U, or W 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](#).
- ❖ All courses counted towards the degree must be taken for a letter grade.
- ❖ Note that **ONLY** 100+ courses will count towards your overall GPA.

### Core Coursework (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

Quarter/Core Courses	
	ECE 251A
	ECE 251C
	ECE 253
	ECE 269
<b>Total: 16 Units</b>	

### 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 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 271A-B-C	Statistical Learning I & II, Deep Learning and Applications
ECE 273	Convex Optimization and Applications
ECE 275A-B	Parameter Estimation I & II

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

\*ECE 250 Recommended for Ph.D. students

### Technical Electives (20 Units)

- ❖ Any 4 unit, 200+ course from ECE, CSE, MAE, BENG, CENG, NANO, SE, MATS, MATH, or PHYS 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 courses of undergraduate ECE coursework (ECE 111+ only\*) and one 4-unit course of CSE undergraduate coursework (CSE 100+ only\*\*) may be counted.
- ❖ MS students (Plan II) are allowed no more than 4 units of ECE 299 (research units) as technical electives. PhD and MS students (Plan I) are allowed no more than 8 units of ECE 299 as technical electives.
- ❖ With the exception of research units, all courses counted towards the degree must be taken for a letter grade.

\* Not including ECE 195, 197, 198, 199 or 298

\*\* Not including CSE 123A, 140, 140L, or 143

Quarter/Tech. Electives	
<b>Total: 20 Units</b>	

**Curriculum Advisor (Fall):** Piya Pal [pipal@ucsd.edu](mailto:pipal@ucsd.edu)  (858)-246-2565

**Curriculum Advisor (Winter/Spring):** Vikash Gilja [vgilja@ucsd.edu](mailto:vgilja@ucsd.edu)  (858)-822-0685

**Curriculum/Faculty Advisor:** Advises M.S. students regarding course selection; Considers any exception requests requiring faculty approval (such as course substitutions); Sign forms; Technical engineering related questions & job advice- **PLEASE CONTACT YOUR STAFF ADVISOR FOR ALL OTHER ISSUES.**