

- ❖ 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 269	Linear Algebra & Application
ECE 271A	Statistical Learning I
ECE 272A*	Stochastic Processes in Dynamic Systems I
ECE 276A	Sensing & Estimation in Robotics

\*Students may take MAE 280A in place of ECE 272A. May only receive credits for one of these courses towards the degree.

### 12 Additional Units Selected from the following

ECE 250	Random Processes
ECE 252A-B	Speech Compression, Speech Recognition
ECE 253	Fundamentals of Digital Image Processing
ECE 271B-C	Statistical Learning II, Deep Learning & Applications
ECE 272B	Stochastic Processes in Dynamic Systems II
ECE 273	Convex Optimization & Applications
ECE 275A-B	Parameter Estimation I & II
ECE 276B-C	Planning & Learning in Robotics, Robot Reinforcement Learning
ECE 285*	Special Topics in Signal & Image Processing/Robotics & Control Systems
CSE 250A	Principles of Artificial Intelligence: Probabilistic Reasoning & Learning
CSE 252A	Computer Vision I
MAE 247	Cooperative Control of Multi-Agent Systems
MAE 280A**	Linear Systems Theory
MAE 281A	Nonlinear Systems

\*Multiple ECE 285 courses may be used to satisfy this requirement, as long as each topic is different.

\*\*Students can't count MAE 280A towards their additional units or technical electives if they have taken ECE 272A.

### Technical Electives (20 Units)

- ❖ Any 4 unit, 200+ course from ECE, CSE, MAE, BENG, CENG, DSC, NANO, SE, MATS, MATH, PHYS or COGS 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 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 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 195, 197, 198, 199, 210 or 298

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

### Curriculum Advisor

#### [EC80 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.**

Quarter (List FA##, WI##, SP## below)	Core Courses
	ECE 269
	ECE 271A
	ECE 276A
<b>Total: 16 Units</b>	

Quarter (List FA##, WI##, SP## below)	Additional Units
<b>Total: 12 Units</b>	

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