

- ❖ 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: SIO 202A-B and 8 units (16 Units)

SIO 202A-B	Fundamentals of Wave Physics
SIO 210	Physical Oceanography
SIO 240	Marine Geology
SIO 260	Marine Chemistry
SIO 280	Biological Oceanography

Quarter (List FA##, WI##, SP## below)	Core Courses
	SIO 202A
	SIO 202B
<b>Total: 16 Units</b>	

### 12 Additional Units Selected from the following

ECE 222A-B	Antennas and Their System Applications, Applied Electromagnetic Theory—Electromagnetics
ECE 225A	Probability & Statistics for Data Science
ECE 228	Machine Learning for Physical Applications
ECE 240A	Lasers & Optics
ECE 250	Random Processes
ECE 251A-B-C-D	Digital Signal Processing I & II, Filter Banks & Wavelets, Array Processing
ECE 253	Fundamentals of Digital Image Processing
ECE 269	Linear Algebra & Applications
ECE 271A-B	Statistical Learning I & II
ECE 273	Convex Optimization & Applications
ECE 275A-B	Parameter Estimation I & II

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>	

### Technical Electives (20 Units)

- ❖ Any 4 unit, 200+ course from ECE, CSE, DSC, SIO, MAE, BENG, CENG, NANO, SE, MATS, MATH, or PHYS taken for a letter grade may be counted.\* Exceptions to this list require departmental approval.
- ❖ The following courses are recommended, not required: ECE 278; SIO 203 A-B/MAE 294 A-B/ECE 278 and remaining courses from SIO 210, 240, 260, 280.
- ❖ Up to 12 units of undergraduate ECE coursework (ECE 111+ only\*\*) OR up to two 4-unit courses of undergraduate ECE coursework (ECE111+ 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

[EC75 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.