

2023 - 2024 ECE M.S. / Ph.D. Degree Planner: Applied Ocean Sciences (EC75)

- 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/Core Courses SIO 202A SIO 202B Total: 16 Units

12 Additional Units Selected from the following

Antennas and Their System Applications, Applied Electromagnetic Theory—Electromagnetics
Probability & Statistics for Data Science
Machine Learning for Physical Applications
Lasers & Optics
Random Processes
Digital Signal Processing I & II, Filter Banks & Wavelets, Array Processing
Fundamentals of Digital Image Processing
Linear Algebra & Applications
Statistical Learning I & II
Convex Optimization & Applications
Parameter Estimation I & II

Quarter/Add. Courses		
Total: 12 Units		

Quarter/Tech. Electives		
Total: 20 Units		

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 any Jacobs School of Engineering 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.
 - ECE 299, CSE 298/299, MAE 299, BENG 299, NANO 299, SE 299
- * Not including ECE 195, 197, 198, 199, 210 or 298
- ** Not including CSE 123, 140, 140L, or 143
- *** Seminar courses cannot count towards your degree

Curriculum Advisor

EC75 Advisor: Florian Meyer Email: flmeyer@ucsd.edu Phone: (858) 246-5016 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.