

M.S. / Ph.D. Degree Planner: Medical Devices & Systems (EC90) 2018-2019

Minimum of 12 units (Plan I) or 14 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.

Core Coursework (12 Units including ECE 201), choose 2 courses:

ECE 201	Intro to Biophysics
ECE 187*	Intro to Biomedical Imaging & Sensing
ECE 202	Medical Devices & Interfaces
ECE 203	Biomedical Integrated Circuits & Systems
ECE 204	Statistical Learning in Bioinformatics
ECE 247A-B-C	Advanced Biophotonics, Bioelectronics, Bionanotechnology

Quarter / Core Course	
Total: 12 units	

*Students can take BENG280A OR ECE 187, not both. Only one of these courses could count towards the degree.

12 additional units selected from the following:

- Two CORE graduate courses from the same major area of ECE (AEM, AP-EDM, CTS, ECS, CE, ISRC, MLDS, NDS, PHO, or SIP)
- One graduate or senior-level course in Biology, Biochemistry, or Medicine.

Some examples of courses that satisfy this requirement are: BENG 230A, BENG 230B, BENG 231, NANO 242, BGGN 235, BGGN 211, BGGN 223, BGGN 224, BGGN 242, and BGGN 249B-C. This is by no means a comprehensive list of courses and many more courses in biology, biochemistry, and medicine are offered by UCSD to meet the requirement. PhD students should discuss with their faculty advisor and M.S. students with their curriculum advisor to choose course(s) in biomedicine relevant to their graduate study.

Quarter / Additional Units	
Total: 12 units	

Technical Electives (24 units)

- Any 4 unit, 200+ course from ECE, CSE, MAE, BENG, CENG, NANO, SE, MATS, MATH, or PHYS 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 (CSE100+ 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.
- All courses counted towards the degree must be taken for a letter grade.
- Students are strongly encouraged to take as least 2 seminar courses about translational research and FDA regulatory procedures and requirements from ECE, Center for Medical Device and Instrumentation, School of Medicine, or other departments. (Will NOT be counted toward required 48 units).

Quarter / Tech. Electives	
Total: 24 units	

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

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

Curriculum Advisor: Patrick Mercier	
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Advisor's Signature _____ Date _____

Print Student Name (Last, First) _____ UCSD Email _____ PID _____

