

M.S. / Ph.D. Degree Planner: Medical Devices and Systems (EC90)

COURSE REQUIREMENTS

Core Coursework (twelve units)

ECE 201 Introduction to Biophysics

Any 2 of the following courses:

ECE 202 Medical Devices and Interfaces
ECE 203 Biomedical Integrated Circuits and Systems
ECE 204 Statistical Learning in Bioinformatics

Core Courses	
	ECE 201
Total: 12 Units	

ECE 247 A-B-C Advanced Biophotonics, Bioelectronics, Bionanotechnology
ECE 187 Introduction to Biomedical Imaging and Sensing. (Students can take BENG280 or ECE 187 --not both).

Twelve additional units selected from the following

Two CORE graduate courses from the same major area of ECE (AOS, AP-EDM, AP-RSS, CTS, ECS, CE, ISRC, PHO, SIP or NDS)

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.

Additional Courses	
Total: 12 Units	

Technical Electives (twenty-four units)

- With the exception of research units, all courses counted towards the degree must be taken for a letter grade.
- 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.
*ECE 187 or BENG 280 A will count for credit, not both
- Up to two 4-unit courses of undergraduate ECE coursework (ECE 111+ only) and one 4-unit course of undergraduate CSE coursework (CSE 100+ only).
- M.S. Students (Plan II) are allowed no more than 4 units of 299 as technical electives. Ph.D. and M.S. Students (Plan I) are allowed no more than 8 units of 299 as technical electives.
- 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).

Technical Electives	
Total: 24 Units	

Curriculum Advisor: Shadi Dayeh
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Advisor's Signature

Date

Student Name

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