

# 2023 - 2024 ECE M.S. / Ph.D. Degree Planner: Medical Imaging (EC95)

- 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 <u>here</u>.

#### **Core Courses (8 Units)**

BENG 280A OR ECE 207A	Principles of Bioengineering OR Principles of Medical Imaging
BENG 280B	Comparative Biomedical Imaging

## 16 Additional Units Selected from the following

BENG 280C	Imaging Cardiovascular Disease
BENG 235	Molecular Imaging and Quantitation in Living Cells
BENG 278	Magnetic Resonance Imaging
ECE 247A/BENG 247A /NANO 247A*	Advanced Biophotonics
ECE 250	Random Processes
ECE 253	Fundamentals of Digital Image Processing
ECE 269	Linear Algebra and Application
ECE 273	Convex Optimization and Applications
ECE 275A	Parameter Estimation I

<sup>\*</sup>Students may take BENG 247A/NANO 247A in place of ECE 247A. May only receive credit for one of these courses towards their degree.

## Writing/Presentation (4 Units)

BENG 224	Regulatory Affairs
BENG 225	Business of Biotech

Quarter/Writing/Presentation		
Total: 4 Units		

### **Human Physiology, Pathology, or Anatomy (4 Units)**

BIPN 100	Human Physiology I
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Quarter/Human Physiology	
	BIPN 100
Total: 4 Units	

Quarter/Core Courses	
	BENG 280A OR ECE 207A
	BENG 280B
Total: 8 Units	

Quarter/Add. Courses	
Total: 16 Units	

Quarter/Tech. Electives	
Total: 16 Units	

## **Technical Electives (16 Units)**

- Any 4 unit, 200+ course from ECE, CSE, DSC, MAE, BENG, CENG, 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 course 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 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

#### **Curriculum Advisor**

EC95 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.

<sup>\*</sup> Not including ECE 195, 197, 198, 199, 210 or 298

<sup>\*\*\*</sup> Seminar courses cannot count towards your degree