

## M.S. / Ph.D. Degree Planner: Medical Imaging (EC95) 2021-2022

- ❖ Minimum of 12 units (Plan II) 16 units (Plan I) must be 201+ ECE courses that must count toward your degree.
- ❖ All courses counted towards the degree must be taken for a letter grade, with the exception of research units.
- ❖ Students **CANNOT** repeat a course unless they earned a D, F, U, or W 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](#).
- ❖ Note that **ONLY** 100+ courses will count towards your overall GPA.
- ❖ Must meet the Academic Residency requirement. More detailed info can be found [here](#).

### Core Coursework: BENG 280A/B OR ECE 207A/B (8 Units)

BENG 280A OR ECE 207A	Principles of Bioengineering OR Principles of Medical Imaging
BENG 280B OR ECE 207B	Comparative Biomedical Imaging OR <b>*MISSING COURSE NAME (NOT ON COURSE CATALOG)</b>

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

### 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 OR BENG 247A OR 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

Quarter/Add. Units	
<b>Total: 16 Units</b>	

### Writing/Presentation (4 Units)

ECE 189	Technical Public Speaking (2 units)
ENG 100B	Engineering Leadership (2 units)

Quarter/ Writing/Presentation	
	ENG 189
	ENG 100B
<b>Total: 4 Units</b>	

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

BILD 26	Human Physiology
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Quarter/ Human Physiology	
	BILD 26
<b>Total: 4 Units</b>	

### Technical Electives (16 Units)

- ❖ 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
- ❖ With the exception of research units, all courses counted towards the degree must be taken for a letter grade.
- ❖ Any 4 units, 200+ courses from ECE, CSE, MAE, BENG, NANO, taken for a letter grade may be counted. Exceptions to this list require departmental approval.
- ❖ \*Exclude ECE 195, 197, 198, 199, 210 or 298
- ❖ MS students (Plan II) are allowed no more than 4 units of any Jacobs School of Engineering Research units as technical electives. PhD and MS 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

\*\*\* Seminar courses cannot count towards your degree

Quarter/Tech.Electives	
<b>Total: 16 Units</b>	

**Curriculum Advisor (Fall):** Piya Pal [✉ ppal@ucsd.edu](mailto:ppal@ucsd.edu) [📞](https://www.whatsapp.com/channel/0029va211111111111111111) (858)-246-2565

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**Curriculum/Faculty Advisor:** Advises M.S. students regarding course selection; Considers any exception requests requiring faculty approval (such as course substitutions); Sign forms; Technical engineering related questions & job advice- **PLEASE CONTACT YOUR STAFF ADVISOR FOR ALL OTHER ISSUES.**