**Example Course Plan** 

# **Biomedical Imaging (BI)**



A complete list of our graduate courses can be found in the General Catalog: https://catalog.registrar.ucla.edu/

Below you will find a list of courses recommended for students interested in the **Biomedical Imaging (BI**) Field for you to draft your degree study plan. Make sure you are using the most current information when planning your courses toward your degree and project your graduation quarter. Keep in mind courses are not offered every quarter.

\*\*\*\*MS and PHD Program requires graduate courses with at least 4 units and that are letter graded.

BE # offered only by Bioengineering,C # concurrently schedule with another course,M # Multiple-listed courses with other majors.

### **Core Courses**

- BE M209 Signal and Image Processing for Biomedicine
- BE M219 Principles and Applications of Magnetic Resonance Imaging
- BE M229 Advanced Topics in Magnetic Resonance Imaging

#### **Elective Courses**

- BE 224A Physics and Informatics of Medical Imaging
- BE 242 Biophotonics
- BE 224B Advances in Imaging Informatics
- BE C266 Wearable Bioelectronics
- BE C247 Applied Tissue Engineering: Clinical and Industrial Perspective
- BE M248 Introduction to Molecular Imaging
- BE C275 Machine Learning and Data-Driven Modeling in Bioengineering

## Elective Courses for Sub Field – Biomedical Signal and Image Processing (BSIP)

PBM 222 - Advances in Medical Magnetic Resonance: Clinical MR Spectroscopy and Fast MRI Techniques
PBM 225 - Contrast Mechanisms and Quantification in Magnetic Resonance Imaging
ECE 205A - Matrix Analysis for Scientists and Engineers
ECE 236A - Linear Programming
ECE C247 - Neural Networks and Deep Learning
STATS 200A - Applied Probability

## Elective Courses for Sub Field – Biomedical Imaging Hardware Development (BIHD)

ECE 211A - Digital Image Processing I ECE M217 - Biomedical Imaging ECE 271 - Classical Laser Theory ECE 273 - Nonlinear Photonics