Designated Emphasis in Biophotonics and Bioimaging (DEBB)
4 courses: 2 required + 2 elective

**REQUIRED:**
1. Selected topics in Biophotonics and Bioimaging – Directed Group Study (298). Total of 3 units: 1 unit per quarter
2. Fundamentals of Biophotonics and Bioimaging (Offered as upper division undergrad.) - 4 Units - New Course

**ELECTIVES (offered):**
PHY 108: Optics (prerequisite) – upper division
PHY 108L: Optics Laboratory (1) – upper division
EEC235: Photonics
EEC236: Nonlinear Optical Applications
EEC237A: Lasers
EEC237B: Advanced Lasers
BIM 242: Introduction to Medical Imaging
BIM 243: Radiation Detectors for Biomedical Application
BIM 257: Fundamentals of Tissue Optics and Biomedical Applications
BIM 251: Medical Image Analysis
BIM 281: Acquisition and Analysis of Biomedical Signals
BIM 282: Biomedical Signal Processing
BIM 288: Introduction to Ultrasound Imaging
NSC/NPB/PSC 211: Advanced Topics in Neuroimaging
NSC 261A: Topics in Vision: Eyes and Retinal Mechanisms
NSC 261C: Topics in Vision: Clinical Vision Science
NSC 201: Neuroanatomy for Graduate Students
BIM 287: Concepts in Molecular Imaging
BIM 202: Cell and Molecular Biology for Engineers
ECS 271: Machine Learning and Discovery
ECS 276: Advanced Volume Visualization (relevant to 3D medical image data)