Courses available to make the necessary 18 imaging credits

| Imaging Methods (Required: at least 1 course, up to 8 credits) | | |
|---|---------------------------------------|-----|
| Principles of Magnetic Resonance Imaging | BME 7710 | 4 |
| Optics Lecture | PHY 5340 | 3 |
| Optics Lab | PHY 5341 | 2 |
| Introduction to Radiological Physics | RAD 5010 | 4 |
| Physics in Medicine | RAD 6710 | 3 |
| Imaging Physics | RAD 7000 | 4 |
| Imaging Physics II: Nuclear Medicine | RAD 7010 | 2 |
| Diagnostic Imaging Lab | RAD 7050 | 2 |
| Advanced Imaging | RAD 7160 | 2 |
| Introduction to Biomedical Imaging | BME 5995 | 3 |
| Neuroscience and Imaging (Recommended: 1 course) | | |
| MR Imaging of Neurovascular Disease | BME 7720/ PYC 7320 | 3 |
| Fundamentals of Neuroimaging | PYC 7140 | 3 |
| Imaging and Neurodevelopment | PYC 7515 | 3 |
| Image/Signal Processing (Required: at least 1 course, up to 12 credits) | | |
| Introduction to Pattern Recognition | CSC 5860 | 3 |
| Digital Image Processing and Analysis | CSC 6860 | 3 |
| Computer Graphics | CSC 5870 | 3 |
| Computer Graphics II | CSC 6870 | 3 |
| Artificial Intelligence | CSC 6800 | 3 |
| Computer Vision | CSC 7860 | 3 |
| Seminar Topics in Computer Vision and Pattern Recognition | CSC 8860 | 3 |
| Digital Image Processing | ECE 5690 | 4 |
| Digital Signal Processing | ECE 5770 | 4 |
| Pattern Recognition | ECE 7670 | 4 |
| Advanced Digital Image Processing | ECE 7680 | 4 |
| Advanced Biomedical Signal Processing and Signal Modeling | BME 5595 | 4 |
| Medical Imaging Systems | BME 7730 | 3 |
| Math/Physics Background (Required: at least 1 course, up to 12 credits) | · · · · · · · · · · · · · · · · · · · | |
| Matrix Computation I | ECE 5020/ CSC 6620 | 4 |
| Mathematical Methods in Engineering | ECE 7030 | 4 |
| Mathematical Modeling in Impact Biomechanics | ECE/ IE/ ME 7100 | 4 |
| Statistical Computing and Data Analysis | MAT 5030 | 3 |
| Numerical Methods | MAT 5100 | 3 |
| Partial Differential Equations and Boundary Value Problems | MAT 5220 | 4 |
| Introduction to Probability Theory | MAT 5700 | 4 |
| Introduction to Mathematical Statistics | MAT 5800 | 4 |
| Methods of Theoretical Physics I | PHY 5100 | 3 |
| Methods of Theoretical Physics II | PHY 7110 | 3 |
| Electromagnetic Fields I | PHY 6600 | 3 |
| Electromagnetic Fields II | PHY 6610 | 3 |
| Electromagnetic Theory I | PHY 7600 | 3 |
| Imaging Seminars (0 or 1 credit accepted) | | |
| Seminars in Biomedical Imaging | BME 8710 | 1 |
| Lab Rotations (Required: at least 2 credits, up to 3 credits) | | |
| Lab Rotations/Directed Study | BME 7990 | 2-3 |