

## MAGNETIC RESONANCE IMAGING(SHORT) COURSES

### TECHNICAL COURSEWORK

<b>MRI Physics</b>	<b>Module I</b>	In this module, quantum mechanics concepts of MRI are discussed and demonstrated with animations and required software. Image quality, artifacts, trade-offs, and parameter optimization is discussed in detail. Safety concerns and bio-effects of magnetic field, RF field, and gradient fields will be discussed and proper screening of patients will be emphasized. Pulse sequence selection and protocol designing as part of physics will be reviewed and performed.
<b>MRI Sectional Anatomy</b>	<b>Module II</b>	This module comprises detailed discussions, demonstrations, and presentation of different body systems from a cross sectional point of view. It will present images in different contrasts and viewing options. This includes, but is not limited to, sagittal, coronal, and transverse planes.
<b>Externship - MRI Short</b>	<b>EXTMS</b>	This module involves the direct interaction of the student with a specific medical environment. The student is assigned to a hospital, imaging center, clinic or other environment in which MRI is performed on a regular basis on patients needing care.