



## SIEMENS AVANTO/ESPREE COURSE OVERVIEW

**Course:** This course covers the basic maintenance, calibration and service of the Siemens product line of MR Imaging Systems.

Included is coverage of the major sub-systems of the MRI system which will familiarize the student with the components of each of these sub-systems, how they operate and the approach to troubleshooting used on these systems.

The student will also perform preventive maintenance procedures on a functional Siemens Espree MRI system at the training facility.

**Qualifications for Admission:** Students should have prior MRI service experience, preferably with Siemens MRI. They should have a minimum of a two- year degree in electronics or equivalent experience. Students should have basic computer skills and a laptop computer.

### Course Overview:

Features: Hardware Layout Drawings and Diagrams, Scan Parameters, Scan Protocols Image Quality performance verification.

- Operator Console
- System Cabinet
  - Advanced Measurement Control (AMC)
  - Radio Frequency Signal Unit (RFSU)
  - RF Application System (RFAS)
  - Image Reconstruction (MRIR)
- Gradient (GPA) Cabinet
  - Gradient Small Signal Unit (GSSU)
- Scan Room Electronics
  - Transmit Antenna Selector (TAS)
  - Receive Coil Channel Selector (RCCS)
  - RF Infrastructure (RFIS)
  - Magnet Supervision (MSUP)
- Patient Handling
- Magnet Configuration

**Summary:** Upon Completion of the 5 day course, the engineer should be able to provide service and use troubleshooting skills to service to the subsystem level. Hands on laboratory exercises will give the engineer experience with routine maintenance, calibrations, documentation, and typical service events.

\*Course outline may change to meet student's needs\*