

Operator Training Syllabus – Bruker 7T

Operator Training Certification

The goal of the training program is to provide resources and experiences that allow you to operate the 7T scanner independently. Certification is granted for operating between the hours of 7:30 am and 4:30 pm during weekdays.

Requirements

1. Complete readings and watch videos described in the syllabus before each training session
2. Observe a trained operator for one hour, get their signature
3. Hands-on, group training (2 sessions x 2 hr/session = 4 hours total)
4. Lab practical demonstrating your ability to operate independently
5. Arrive 5 min prior to each training session

Training Syllabus

Session	Homework Due <u>Before</u> This Session	Topics/Tasks
1 Observation	*View Videos 1-7 ¹ * Reading 1, Ch. 3 and 4	* Observe all steps of setting up an MRI experiment and collecting the image
2 Hands-on	* Reading 1, Section 5.7 *View Videos 8-9 ¹ * http://www.revisemri.com/tools/kospace/	* Sample handling, coil handling, matching/tuning, resources, data export, recording center frequency and ref attenuation, physio equipment
3 Hands-on	* Reading 2, Ch. 17, Scan Parameters and Imaging Optimization * Reading 1, Ch. 5, Factors Affecting the Signal-to-Noise Ratio * View Video 10 ¹	* You will demonstrate all skills from previous session with guidance
4 Lab Practical	* Reading 3 – you select the topic(s)	You will run a scan independently.

Expiration and Renewal

Operator training is retained if you meet all of the following:

1. You have scanned independently in the past four months
2. You have attended a user's group meeting within the past four months

¹ Videos: <http://www.magritek.com/videos.html>