EL 455 - Biomedical Signal Processing

3 Credit Hours
Description of the systems: XRay, CT, MRI, Ultrasound -, Types of electrophysiological measurements, Electrocardiography (ECG), Electroencephalography (EEG), Electromyography (EMG); introduction to Neurons Dynamics Dendrites and Synapses and their mathematics, Hodgkin Huxley Model, Generalized integrate and fire models Dynamics of Cognition. Importance of and evolution of Medical Applications of AI and Introduction to Biosensors.

Prerequisites

[EL 410](EL 410) [EL 320](EL 320)