



## BCI – Control of Wheelchair

### Background:

**Electroencephalography (EEG)** - is the recording of electrical activity across the scalp evoked by neural activity in the brain.

**EEG** recording done using special cap with embedded electrodes.

Sensory, cognitive and motor evoke characteristic EEG patterns and changes in EEG rhythms

### Prerequisites:

- MAMAT - Introduction to software systems design
- MAVLAS - Digital signal processing
- Length: 2 semesters.

### Project Description:

Different projects will focus on:

1. Single trial, real time, signal processing for detecting event related potentials.
2. Characterization of event-related potentials associated with task monitoring.
3. Actual implementation of BCI for controlling an external device.

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