| Name of the subject: | NEPTUN-code: | Credits: 4 |
|----------------------------------|--------------|------------|
| Introduction to the Mechatronics | BMXMEE1BNE | ECTS: 6 |
| Subject leader: | Title: | |
| Dr. István Nagy | ass. prof. | |
| Course description: | | |

The subject and concept of mechatronics. Characteristics and the components of mechatronics systems. Mechanical parts of the systems: transmission of the power, energy and moving mechanisms. Electrical parts of the system: sensors, transducers, electric circuits. Metrology: measuring systems, principle of measuring, electronic and non-electronic measuring. Signal processing, distribution of the signals. Information technology: the phases of the information processing, typically used in mechatronics. Control strategies: software—based control strategies.