The aim of the course is introduction to biomedical, technological and health care application areas, which form the basis for the next generation of telemedicine systems. The course consists of lectures from the medical, technological and industrial areas related to telemedicine and supplemented by visit at company working with healthcare technology. The course will also have hands-on programming sessions with sensor systems for measuring human physiological parameters.

Course keywords:
- Human physiology, anatomy and the large disease groups: Cancer, diabetes, blood vessel calcifications, heart diseases and chronic lung disease.
- Measuring human physiological parameters.
- Analysis of biomedical signals.
- Wireless systems as a tool for communicating measured human physiological parameters for clinical monitoring and rehabilitation, targeting telemedicine systems.
- Examples of existing and emerging medical and rehabilitation systems e.g. for clinical diagnosis and monitoring of the large disease groups, using telemedicine.

Course sessions, group work, project work, some course sessions hosted by int. company within healthcare technology and research group within telemedicine.

Combines the learning of new methods with the applications of these methods.

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