

Field Mapping

Lecturer: Dr. Gábor Brolly, PhD.

Institute: University of Sopron, Faculty of Forestry, Institute of Geomatics and Civil Engineering

Course code: EG657-EN

Credit points: 3

Time table: Lecture:1/Lab: 2

Language: English

Course description

Topics

Lectures: The main goal is to learn and practice methods of creating / updating maps by means of hand-held mobile mapping devices (also known as GIS data collectors) that support real-time GPS/GNSS measurements. Main topics in theory: Basics of maps and geographic information systems, Global Navigation Satellite Systems (GNSS/GPS concepts and implementation), GNSS/GPS receivers (properties, functionality, accuracy), Impacts on measurement accuracy.

Practice: Mobile mapping devices and their practical use (capturing features and attributes in the field), Creation and update of maps in the field, Mapping of vegetation and land use, Planning and processing of field surveys.

References

1. Presti L., Lachapelle G. (2012): GNSS Core technologies. Lecture notes. European Commission, Joint Research Centre, Ispra (VA), Italy.
2. B. Hofmann-Wellenhof, H. Lichtenegger, E. Wasle (2008). GNSS-Global Navigation Satellite Systems (GPS, Glonass, Galileo and more), Springer, Wien, New York.