

Tárgy neve: Geodesy

Tárgyfelelős neve: Dr. Kovács Béla

Tárgyfelelős tudományos fokozata: PhD

Tárgyfelelős MAB szerinti akkreditációs státusza: AT

Az oktatás célja:

a, knowledge

- Knowledge of the theoretical principles of positioning on the ground;
- Knowledge of the types of geodetic measurements, the best-known procedures and instruments used;
- Knowledge of the technical content of spatial data obtained by modern geodetic methods, their applicability in the process of creating map databases

b, abilities

- Ability to select the most appropriate geodetic data extraction method for the task in question, taking into account the technical and accuracy requirements of the task;
- Ability to evaluate the technical content of spatial data generated by geodetic methods and their incorporation into map databases, and to use spatial data obtained by geodetic methods.

c, attitude

- Knowledge of geodetic survey methods and tools, data acquisition technologies, helps to develop an appropriate attitude in professional cooperation with professionals working in the field of surveying
- Committed to environmentally conscious behaviour in his/her field and laboratory activities.

d, autonomy and responsibility

- Independence regarding the thorough examination and elaboration of professional issues and processes.
- Feels responsible for meeting and making others meet the deadlines. He/she is responsible for his/her work and for his/her co-workers' work in projects.
- With his/her knowledge and skills of geoinformatics, he/she cooperates responsibly with professionals in other fields.

Az oktatás tartalma:

- The student becomes acquainted with the role of geodesy in mapping/creating map databases.
- The student forms a concept about the elements and practical implementation of reference systems.
- The student gets acquainted with the basics of geolocation, types and tools of geodetic measurements and modern methods of geodetic data acquisition.
- The participant will learn the use of geodetic field surveying instruments.

A számonkérés és értékelés rendszere: Oral and/or written exam.

Kötelező irodalom:

- B. Hofmann-Wellenhof and H. Moritz: Physical Geodesy, Springer-Verlag Wien, 2005.
- Lu, Zhiping, Qu, Yunying, Qiao, Shubo: Geodesy, Introduction to Geodetic Datum and Geodetic Systems, Springer, 2014.

Wolfgang Torge, Jürgen Müller: Geodesy, Walter de Gruyter, 2012

Ajánlott irodalom:

- Günter Seeber: Satellite Geodesy, Walter de Gruyter, 2003
- Peter J.G. Teunissen, Alfred Kleusberg: GPS for Geodesy, Springer Science & Business Media, 2012