

Tárgy neve: Application of ArcGIS-based Server and Web GIS

Tárgyfelelős neve: Dr. Kohán Balázs

Tárgyfelelős tudományos fokozata: PhD

Tárgyfelelős MAB szerinti akkreditációs státusza: AR

Az oktatás célja:

a, knowledge

- Understand the basics of server and web GIS and their potential for presenting and sharing geographical processes and spatial data

b, abilities

- Familiar with the Esri group of products for server and web GIS, while being able to integrate products and services from other software

- Ability to build a database from spatial data and then share the data according to different needs, making it editable by specific groups or by anyone

- Ability to create different mapping applications that provide data collection, data management, geovisualisation for any discipline dealing with spatial data

c, attitude

- Accepts and adheres to the ethical principles of work and organizational culture, especially with regard to the copyright related to geoinformatics.

- Committed to adhering to and making others adhere to quality requirements

- Monitors professional and technological developments in the field of geoinformatics and the labour market trends.

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 aim of the course is to teach our students the basics of server and web GIS through ArcGIS Server Software. In a complex desktop-server-web architecture, the students have the opportunity to learn a complete GIS workflow from the building of the database to making web mapping applications. They build a GIS database from their own data, then they publish the data through various services. Finally, they create their own map application. Through this process, they will get familiar with other ESRI software (Portal, Online), and they will learn to integrate other services into the system (WMS, WMTS).

A számonkérés és értékelés rendszere: practical course mark based on course work

Kötelező irodalom:

- Di Martino, Sergio & Peron, Adriano & Tezuka, Taro. (2013). Web and Wireless Geographic Information Systems. Journal of Spatial Information Science. 6. 10.5311/JOSIS.2013.6.145.
- Roger Tomlinson: Thinking about GIS. ESRI Press, Redlands, USA, 2007 ISBN: 9781589483484
- <https://learn-arcgis-learnngis.hub.arcgis.com/>

Ajánlott irodalom:

- Keller, G. Randy (1946-) (szerk.), Baru, Chaitanya (szerk.): Geoinformatics: cyberinfrastructure for the solid Earth sciences. Cambridge, Cambridge University Press, 2011 ISBN: 9780521897150
- N.M. Naidu: Geoinformatics and geostatistics. New Delhi, SBS Publishers & Distributors, 2009 ISBN: 9788189741983
- Peterson, Michael. (2017). Advances in Cartography and GIScience: Selections from the International Cartographic Conference 2017. 10.1007/978-3-319-57336-6.
- Sample, John & Ioup, Elias. (2010). Tile-Based Geospatial Information Systems. 10.1007/978-1-4419-7631-4.