

Tárgy neve: Open Source WebGIS

Tárgyfelelős neve: Dr. Gede Máttyás

Tárgyfelelős tudományos fokozata: PhD

Tárgyfelelős MAB szerinti akkreditációs státusza: AT

Az oktatás célja:

a, knowledge

- Complex knowledge of the general geographical, cartographic, planning, mathematical and informatic principles, rules, relationships required for the practice of geoinformatics, especially in the following topics: geovisualization, geoinformatics system engineering, programming, web geoinformatics solutions, services, open source geoinformatics

b, abilities

- Ability to understand complex technical problems, identifying the necessary theoretical and practical background and solving problems

- Ability to design value-added services

- Ability to create decision support geoinformation systems

c, attitude

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

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

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:

- General structure and components of WebGIS applications
- Introduction to OpenLayers; creating a simple web map page
- Displaying rasters in OpenLayers
- Displaying vector data in OpenLayers
- Managing vector styles
- Adding interactive functions to the map
- Integrating third party geocoding and routing services
- Fundamentals of MapServer, the role and structure of a Mapfile
- Integrating OpenLayers and MapServer
- Feature classification and basic styling in MapServer
- Complex styling in MapServer
- Using queries through WMS

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

Kötelező irodalom:

- Gede Máttyás: The OpenLayers 5 API alapjai. <http://mercator.elte.hu/~saman/edu/ol5/>
- Gede Máttyás: MapServer tutorial. <http://mercator.elte.hu/~saman/edu/mapserver/>

Ajánlott irodalom:

- Thomas Gratier, Paul Spencer, Erik Hazzard: OpenLayers 3: Beginner's Guide. ISBN: 9781782162360 Gábor Farkas: Mastering OpenLayers 3. ISBN: 9781785281006
- Pericles S. Nacionales, Jeff McKenna: MapServer tutorial. <https://www.mapserver.org/tutorial/>