

University of Life Sciences "King Mihai I" from Timisoara
Faculty of Agriculture

Job information

Faculty	Faculty of Agriculture
Department	Sustainable Development and Environmental Engineering
The position in the state of functions	6/II
Function	Professor
The subjects in the education plan	Advanced Cartographic Modeling Geographic Information Systems (GIS) Remote Sensing
Scientific field	GEOLOGICAL ENGINEERING, GEODETIC ENGINEERING, MINING, OIL AND GAS
The theme of the competition tests	1. Geographic Information Systems - Definitions, functions, components, classification. 2. GIS data representation systems. Cartographic projections. 3. Acquiring of GIS data from analog support. Georeferencing maps. 4. The acquisition of GIS data by topo-geodesic, photogrammetric and Remote Sensing methods. 5. Data models used in a GIS 6. GIS spatial analyzes 7. Mobile GIS 8. Remote Sensing. Definitions, the history of Remote Sensing and fields of applicability 9. The physical bases of the Remote Sensing 10. Remote Sensing means and techniques. Passive Remote Sensing. Active Remote Sensing. 11. Satellite systems. Landsat, Sentinel, SPOT 12. Processing of Remote Sensing images. Bibliography: 1. Badea A., Spatial and GIS planning for sustainable development. Syntheses, Ed. MatrixROM, București, 2017 2. Badea A., Spatial and GIS planning for sustainable development. Applications, Ed. MatrixROM, București, 2017 3. Băduț M. - Geographic Information Systems (Gis). Practical Fundaments, Ed. Albastră, 2007

	4. Herbei M. – Gis and cartographic modeling, Ed. Universitas, Petroșani, 2015 5. Herbei M., Șmuleac A., Popescu C. – Digital cartography and Mobile GIS, Ed. Mirton, Timișoara, 2018 6. Imbroane A.M. – Geographic Information Systems, Vol. I, Data Structures, Cluj University Press, 2012 7. Imbroane A.M., Moore D. – Introduction to GIS and Remote Sensing, Ed. Cluj University Press, Cluj Napoca, 1999 8. Munteanu C. - Mathematical Cartography, Ed. MatrixRom 2003 9. Popescu C., Copăcean L., Herbei M. – Remote sensing – theoretical fundamentals, Ed. Eurostampa, Timișoara, 2015 10. Tomoioagă T., Nițu C., Geodesy and geographic information systems, Ed. Universitară, 2015 11. Vorovencii I. – Satellite remote sensing, Ed. MatrixROM, București, 2015
The address where the competition file is sent	The Secretariat of Faculty of Agriculture, Calea Aradului no. 119, 300645, Timișoara, Timiș County