

Prerequisite status: -	Unit Type: Theoretical/practical	The number of units: 2	Name of the lesson: Advanced GIS
Type of additional practical training: Has it <input checked="" type="checkbox"/> does not have <input type="checkbox"/> Science travel <input type="checkbox"/> Laboratory <input checked="" type="checkbox"/> Workshop <input type="checkbox"/> Seminar <input type="checkbox"/>		The number of hours: 48	Expert professor to teach: GIS
Goals: Knowing the types of spatial analysis used in the geographic information system and practical work with them			
Headlines 1- Getting to know the concepts of topology, types of vector and raster overlay 2- Types of analysis based on distance, density, types of analysis based on the direction 3- Types of network analysis 4- Geo-coding and line referencing 5- 3D GIS, Local, focal, zonal, and global analysis types 6- Spatial-statistical analyses 7- A variety of standards, For example, OGC in GIS			
Reference 1- Paul Bolstad, 2016, geographic information system, translated by Hamidreza Jafari, University of Tehran Printing and Publishing Institute. 2- Paul Bolstad, 2019, GIS Fundamentals: A First Text on Geographic Information Systems, XanEdu Publishing Inc. 3- Sui D., Elwood, S., & Goodchild M. (eds), 2013, Crowdsourcing geographic knowledge volunteered geographic information (VGI) in theory and practice, Springer Science & Business Media.			