Fall 2016

EES 79904, CRN 32461, Professor Yuri Gorokhovich

Water Resources, Hydrology, and GISc Analysis (5 hours, 4 credits)

Principles of hydrology and water resources; analysis of hydrologic data using open-source and commercial Geographic Information Systems (GIS). Statistical and spatial analysis, mapping of critical hydrologic conditions, coupling GIS with hydrologic data analysis and modeling.

Prerequisite: GEP504 or GEP505

This course is designed for students to gain experience in integrating hydrologic data with spatial analysis and mapping using GIS.  A thorough understanding of mapping, spatial analysis, and new computer-aided geo-statistical methodologies is critical within many water resources management disciplines.  At the same time, GIS practitioners should be knowledgeable in hydrology and water resources disciplines to make their applications professionally reliable. This course is intended to serve as one of the electives in the EEGS Department’s graduate level certificate program in Geographic Information Science (GISc), and the new Master’s degree program in GISc. The material presented in the course requires introductory practical skills with GIS software.