

GEOSPATIAL ANALYTICS (IAG)

IAG 620 Understanding Geographic Information Systems 3

Study and application of geographic information systems for professional problem-solving, spatial analysis, and mapping.

IAG 621 Advanced Cartography 3

Advanced instruction in cartographic production techniques and introduction to cartographic research. Students will learn to evaluate academic literature and to implement research ideas using state-of-the-art technology.

IAG 622 GIS Applications in Urban Planning 3

Theory and practice integrating Geographic Information Systems with land use planning practice. Emphasis on advanced analysis and display of spatial data and information in support of land use planning decision-making.

IAG 623 Advanced Geographic Information Systems 3

Advanced concepts and methods in Geographic Information Systems (GIS). Emphasis is placed on the analysis and modeling of geospatial data using raster and vector data models.

IAG 624 Advanced Remote Sensing-Imaging 3

Remote sensing of the environment using scientific visualization and digital image processing techniques.

IAG 625 Spatial Analysis 3

Theory and practice in combining Geographic Information Systems software with statistical analysis software. Emphasis will be on the quantitative analysis and visual display of spatial information.

IAG 626 GIS Programming and Design Application 3

Theory and practice in the creation of Geographic Information Systems using logic-based programming and database construction tools. Emphasis on modeling of spatial information and logic-based approaches to GIS.

IAG 689 Capstone Project in Geospatial Analytics 3

Capstone course. Students work with local industries and nonprofit organizations to solve important data science problems under the supervision of a mentor.