# Fall 2021

Geospatial Data Acquisition and Management

GEG 236 (3 credit hours) - Part of the proposed micro-credential series (GEG 236, 237, 238) and A.A.S. in GIST (awaiting SUNY approval)

This course addresses the interpretation and understanding of a variety of data formats used by geospatial professionals. It introduces the fundamental concepts such as primary Geospatial Information Science (GIS) data creation, geodatabase design and creation, data management, and discusses quantitative techniques for the collection, classification, integration, and management of geographical data. Advanced topics include: UAS data collection and processing, mobile data collection, automation using Python and enterprise geodatabases. Students will be guided through a series of lectures hands-on computer-based exercises, and an end of semester project.

Prerequisites: Introduction to Remote Sensing (GEG 133) or permission of the instructor.
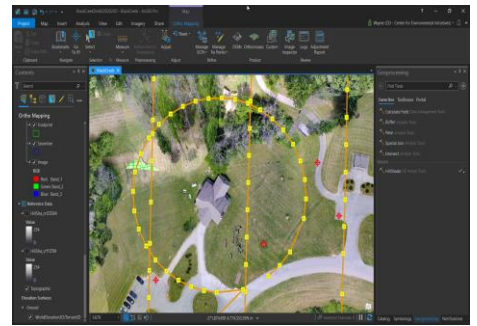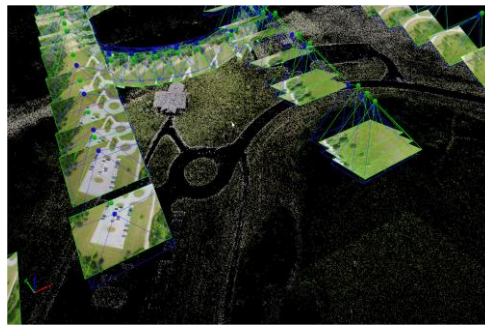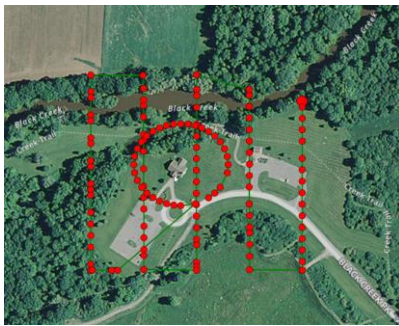
Students in this course:

- Learn important geospatial data management skills that are in high demand!
- Learn the fundamentals of UAS (drone) training, safety, mission and flight planning.
- Develop skills in UAS data collection and processing.
- Learn advanced skills in mobile data collection.
- Interact in a multi-user environment using postGIS.

Topics covered:

- Data models, data formats and data management
- Best practices for data collection and processing
- Database management systems and schema
- Advanced geodatabase design
- Topology
- Enterprise geodatabase design
- Using QGIS in a multiuser, postGIS environment
- Introduction to Python automation

Day/Time:
Weds. 5:30 to 9:11 PM
Remote learning or face to face (TBD)
For more information, email: whoward11@monroecc.edu

Faculty:
Wayne D. Howard

Registration:
http://www.monroecc.edu/depts/recreg/howtoreg.htm