## GEOSPATIAL PROGRAMMING AND WEB MAP DEVELOPMENT GRADUATE CREDIT CERTIFICATE PROGRAM

## **Learning Outcomes**

- 1. Application Apply contemporary programming principles to automate geospatial analysis and mapping processes.
- Communication Communicate the nuances of complex spatial relationships with text, voice, and visual products to broadly inform professional and non-technical audiences in a range of contexts.
- Creation Create interactive web-based mapping applications that support spatial data exploration and analysis.
- Critical Thinking Objectively analyze and evaluate a situation in the context of available geospatial programming techniques and technologies in support of problem solving and decision making.
- Cultural Competence Demonstrate knowledge of cultural norms that are respectful of diversity and inclusion to establish a positive and professional work environment.
- Ethics Demonstrate ethical conduct by producing quality work, contributing to the community, managing professional relationships by establishing honest and respectful interactions among individuals and organizations.
- Knowledge Apply knowledge of programming technologies to design and implement custom user interfaces in support of mapping and spatial analysis to educate, solve problems and make decisions.
- Professional Demonstrate conduct in alignment with professional standards in interpersonal communication, mediation, and respect for diversity while recognizing appropriate team roles in professional, community and education-based activities.
- Research Combine accepted programming techniques and geospatial technologies to create new solutions for previously unencountered situations.