Meeting Workforce Needs with Virtual GIST
(Geospatial Information Science Technology)

Virtual Geospatial Information Science Technology Education. (GIST) –
(Award Number: 1955256)

Virtual GIST at MCC

https://atecentral.net/msites/MCC_GIST

Our goal is to meet the growing need for highly skilled geospatial technicians – to give more students the opportunity to earn credentials that lead rewarding careers, and to support professionals who want to advance in their current positions.

OBJECTIVES

- Offer Virtual AAS degree program in Geospatial Information Science & Technology, providing more students in our community with a strong career path and the flexibility of online study. Expected 2022.
- Provide Virtual Micro-credential for current GIST professionals to enhance marketable career skills and value to employers. Expected 2022.
- Develop new GIST courses that provide students with the highest level of career preparation: GEG 236 (Geospatial Data Acquisition and Management), GEG 237 (Web Mapping), and GEG 238 (Programming for GIST). Expected as early as Fall of 2021.

ACTIVITIES

- Virtual Internships
- GIST Summer Camps for school-age children
- Innovative Outreach: Librarian and Alumni Mentoring Programs

GRANT DELIVERABLES COMPLETED

- Modified GeoTech's Web Mapping, Geospatial Data Acquisition and Management, and Introduction to Programming for GIST to tie into regional GIST industry needs (Obj. 1).
- GIST & micro-credential approved.
- A.A.S. pending SUNY approval (Obj. 1).
- Online Cartography, Spatial, and Capstone offered (Obj. 2).
- 120+ hours of online support from Alumni GIST/student mentors (Obj. 3).
- Thirteen students completed a virtual internship (Obj.4).
- Two recent graduates received a paid internship (Obj.4).
- Ten (10) public and 5 MCC librarians participated in professional development (PD) as a part of cohort 1 (Obj. 5).
- More than ten (10) high school students attended GIST Summer camp (Obj. 6).

GRANT DELIVERABLES IN PROGRESS

- Offer Geospatial Data Acquisition and Management Fall of 2021 in a hybrid format (Obj. 1).
- Offer Web Mapping and Programming for GIST online spring of 2022 (Obj. 1).
- Continue to offer other GIST courses online (Obj. 2).
- Second year of alumni mentoring/student tutors offered (Obj. 3).
- Additional virtual internships planned spring and summer of 2022 (Obj. 4).
- Cohort 2: ten (10) public and 5 MCC librarians will participate in professional development (PD) (Obj. 5).
- Forty (40) students will utilize the public library to access the virtual geospatial desktop (Obj. 5).

PARTNERSHIPS

NY State Department of State at University of Albany, Genesee Land Trust, National GeoTech Center of Excellence, New York Geographic Alliance, GIS Scholars, EagleView, GIS-SIG, Water for South Sudan, River Area Council of Governments, Tug Hill Commission, and Genesee River Watch, MCC Library Staff, Rochester Regional Library Council, Monroe County Library System, Pioneer Library System, iSchool Syracuse University, Keith Jenkins (Cornell University Geospatial Applications Librarian, Rochester City School District, Upward Bound

PI AND CO-PI NAMES AND CONTACTS

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Alumni Mentors: *Drew Ortego, Catherine DuBreck, Kareem Howard, & Enith (Annie) Lay Soler*

NSF External Evaluator: *Donna Lange, Rochester Institute of Technology Professor/PI DeafTEC*

Grant web site: https://atecentral.net/msites/MCC_GIST

MCC GIST program web site: https://www.monroecc.edu/depts/geography/

MCC Monroe Community College — STATE UNIVERSITY OF NEW YORK

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