Geographic Information Systems Certificate

Goal 1: Technical competence

Goal Description:

Impart discipline specific knowledge focused on technical competence to ensure student success and embody a culture of excellence within the certificate program

Providing Department: Geographic Information Systems Certificate

Progress: Completed

RELATED ITEMS/ELEMENTS

RELATED ITEM LEVEL 1

Understand conceptual and technical knowledge to ensure student success

Learning Objective Description:

For students to be technically proficient they must also grasp the theoretical concepts.

RELATED ITEM LEVEL 2

Final Project work

Indicator Description:

Students are assigned a project in every graduate class that they must work individually and demonstrate their understanding of the course material and ability to apply those in real-world scenario.

Criterion Description:

Students work on projects in every graduate class. The final project is a key component of the final grade. Student must work with their course instructor and formulate a project plan. The final project must demonstrate a thorough understanding of concepts and techniques as evaluated by their instructor.

Findings Description:

Students worked on a final project throughout the semester and submitted a project report as well as presented their final project at the end of the semester. In case of online classes, students were required to record their presentation and submit it.

All the students presented final projects at the end of the semester demonstrating a thorough understanding of course material.

RELATED ITEM LEVEL 3

Final project evaluation

Action Description:

Students pursuing a graduate GIS Certificate must be able to demonstrate technical competence in using geospatial technologies

RELATED ITEM LEVEL 1

Apply knowledge and skills in project work

Performance Objective Description:

Students will practice and demonstrate their capabilities and skills relevant to geographic information systems and science in project that simulate real world scenarios. This will test their readiness for the workforce. We want to ensure that our graduate students are well trained when they enter the workforce to elevate the reputation of the graduate program.

RELATED ITEM LEVEL 2

Final project evaluation

KPI Description:

Student must work on a final project that demonstrates their understanding of geospatial principles and applications in the latest GIS platform. This will ensure that they are trained well for the workforce. Students must atleast earn a grade of B or higher in their final projects.

Target Description:

Students must atleast earn a grade of B or higher in their final projects.

Results Description:

Students worked on a final project throughout the semester and submitted a project report as well as presented their final project at the end of the semester. In case of online classes, students recorded their presentation and submitted it. We have two students in the graduate program who are pursuing a graduate GIS Certificate. All the students presented final projects at the end of the semester demonstrating a thorough understanding of course material. One student's final project was particularly exceptional and the student earned an A grade. This student already has a fulltime job offer. The other student transitioned to the master's program.

RELATED ITEM LEVEL 3

Final project evaluation

Action Description:

Students pursuing a graduate GIS Certificate must be able to demonstrate technical competence in using geospatial technologies

Update to Previous Cycle's Plan for Continuous Improvement Item

Previous Cycle's Plan For Continuous Improvement (Do Not Modify):

Closing Summary

We will continue to evaluate the rigor of our assessment techniques used for Certificate students. So far students in the Certificate are expected demonstrate a thorough understanding of the applied concepts of the GIS software evaluated by means of a hands-on exam and final project. Students are also encouraged to engage in research activities using GIS tools and techniques. Students pursuing a certificate are held to the same rigorous standards as those in the Master's program. They must not only demonstrate hands-on skills using geospatial technology but also demonstrate a good understanding of the theories and principles.

Students pursuing a graduate GIS Certificate will also be encouraged to consider transitioning to the Master's program, if interested.

Update of Progress to the Previous Cycle's PCI:

Students who pursue a graduate GIS Certificate have demonstrated a thorough understanding of the GIS theories and concepts, more importantly the applications of the software. One of the students who graduated from the certificate program has a fulltime job offer and the other student has transitioned into the GIS Master's program starting in fall 2023.

Plan for Continuous Improvement Item

Closing Summary:

We will continue to evaluate the rigor of our assessment techniques used for Certificate students. So far students in the Certificate are expected to demonstrate a thorough understanding of the applied concepts of the GIS software evaluated by means of a hands-on exam and final project. Students are also encouraged to engage in research activities using GIS tools and techniques. Students pursuing a certificate are held to the same rigorous standards as those in the Master's program. They must not only demonstrate hands-on skills using geospatial technology but also demonstrate a good understanding of the theories and principles.

Students pursuing a graduate GIS Certificate will also be encouraged to consider transitioning to the Master's program, if interested.

Additionally, there has been an increase in demand to complete the requirements for a graduate GIS Certificate completely online. We will evaluate the efficacy of students taking all their classes completely online to get a certificate. This will only be possible for students who are working professionals and have 2-3 years of experience using geospatial technologies.