Students can learn about managing Geographic Information Systems (GIS) by enrolling in a new certificate program offered by the Department of Earth and Environmental Sciences. Reda Amer, professor of practice, directs the program. (Photo by Paula Burch-Celentano)

When searching directions using Google Maps, tagging your location on social media or requesting an Uber ride from your smartphone, you are utilizing Geographic Information Systems (GIS) — systems designed to present spatial data.

Now, Tulane students can learn more about managing this type of technology by enrolling in the region’s first complete GIS Certificate Program.

Reda Amer, professor of practice in the Tulane School of Science and Engineering’s Department of Earth and Environmental Sciences, directs the program. Amer said that he began laying the groundwork for the program in 2015.

“That’s the beauty of GIS, you can use it for anything.”

— Reda Amer, professor of practice in the Department of Earth and Environmental
“GIS technology is used in various fields, including environmental sciences, urban planning, political science, business management, real estate, civil engineering and public health, so this program will attract students from all of the university’s schools,” he said. “The program also attracts graduate students from other institutions and industry professionals.”

The School of Science and Engineering currently offers the 13-hour GIS Certificate program for undergraduate students, graduate students and professionals, ensuring that participants learn the complex organization, management and visualization of geospatial data.

The coursework consists of two core courses and two elective courses that help students gain the experience needed to create maps, design geodatabases and complete geoprocessing projects.

The U.S. Department of Labor’s High Growth Industry Profile reported that the geospatial job market is steadily expanding at an annual rate of nearly 35 percent.

Having a solid educational foundation in GIS can help students secure future careers as geoscientists, geospatial analysts, GIS analysts, GIS data managers, GIS technicians, programming leads, project managers and systems architects.

“That’s the beauty of GIS, you can use it for anything,” added Amer.

For more information on the GIS Certificate Program, call 504-865-5198.