## GEOGRAPHIC INFORMATION SYSTEMS (GIS) (CERTIFICATE N0850)

## Humanities and Social Science Division Certificate N0850

Geospatial technologies, including Geographic Information Systems (GIS), Remote Sensing (RS), and Global Positioning System (GPS), are used to capture, store, manage, analyze and visualize geospatial information related to locations on Earth's surface. These technologies are used to combine various types of geospatial information in a digital environment and are widely used in our daily life, government agencies, in almost every industry. Through this program students will develop an understanding of the theoretical underpinnings of geospatial technologies and gain the skills needed to construct highquality applications.

## **Required Courses**

Course Prefix	Course Name	Units
GEOG 9	Geospatial Concepts	3
GEOG 10	Introduction to Geographic Information Systems	3
GEOG 12	Cartography	2
GEOG 13	Geospatial Data Acquisition and Management	3
GEOG 14	Spatial Analysis	3
GEOG 15	Raster Methods	3
GEOG 16	GIS Capstone Portfolio	3
Total Units		20

## **Program Learning Outcomes**

Review Student Learning Outcomes (SLOs) (http://www.mtsac.edu/ instruction/outcomes/sloinfo.html) for this program.