

GEOSPATIAL DATA SCIENCE, CERTIFICATE

What happens when you combine the power of locational intelligence with the deep insight enabled by data science? You get Geospatial Data Science: an exciting, rapidly growing domain that sits at the intersection of geographic information science (GIS) and data science. The Geospatial Data Science Certificate prepares students to analyze and model our world through big data with a spatial lens. From predicting the spread of wildfires in real time, to modeling urban mobility patterns, to building machine learning tools to analyze satellite imagery, geospatial data scientists help us make sense of complex geospatial and locational problems.

This interdisciplinary certificate draws on the strengths of UW–Madison’s world-class programs in Cartography/GIS, Computer Sciences, and Statistics to equip students with both the geospatial foundations and data science skills needed to work in areas like geospatial artificial intelligence (geoAI), environmental predictive modeling, locational business intelligence, and disease-spread prediction.

You take a mix of courses in GIS, programming, and statistical data modeling, gaining hands-on experience with real-world data, cutting-edge tools, and industry-relevant workflows. Whether you’re a Cartography/GIS student looking to enhance your data skills, or a Data Science student looking to add a geospatial dimension to help stand out, the Geospatial Data Science Certificate offers a flexible and forward-thinking path into one of today’s most in-demand skillsets.