
**SOUTH DAKOTA BOARD OF REGENTS
ACADEMIC AFFAIRS FORMS**

New Specialization

UNIVERSITY:	SDSU
TITLE OF PROPOSED SPECIALIZATION:	Geography
NAME OF DEGREE PROGRAM IN WHICH SPECIALIZATION IS OFFERED:	Geospatial Science & Engineering (Ph.D.)

Thus, they require the knowledge of physical geography, human geography and/other disciplines to be fully implemented. All these, however, are facilitated through the use of geospatial techniques, which has been a major push in the discipline. These include Geographic Information Systems (GIS), remote sensing, cartography, global positioning systems (GPS), spatial statistics, and the use of other technologies, such as Unmanned Aerial Vehicles (UAVs) (a.k.a. drones). It is this push that links geospatial techniques and analyses with natural and social sciences to help solve relevant problems facing the world today, which is an internal force in the evolution of the discipline of geography. The Geography specialization prepares graduate students for careers in a wide range of geospatial information research and applications. A student completing this specialization will be prepared to take on environmental and social issues and problems with ability to apply advanced technical and leadership roles in federal, state and local agencies and firms employing GIS, remote sensing, and other geospatial technologies.

3. Provide a justification for the specialization, including the potential benefits to students and potential workforce demand for those who graduate with the credential.²

Many projections from government agencies and market research firms alike point toward the need for trained geographers in the rapidly growing geospatial technology industry as well as growth in GIS-related employment sectors and fields. The U.S. Department of Labor Employment and Training Administration (DOLETA), for example, cites an annual growth rate of approximately 35 percent for the geospatial technology industry, with reliable public sector revenue accounting for approximately one third of the industry's total annual receipts.³ Likewise, P&S Market Research estimates a compound annual growth rate of 10.1 percent from 2017 to 2023 for the global GIS market⁴

A particular highlight is the field of cartography F1 12

Yes/No

Yes

Yes/No

No

Yes/No

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