UNIVERSITY OF
Redlands

GIS Certificate Program (Online)

A GRADUATE CERTIFICATE THAT ALIGNS WITH GEOSPATIAL WORKFORCE NEEDS

In response to the ever-increasing changes in the Geographic Information Systems (GIS) business world, the University of Redlands now offers an online GIS graduate certificate program starting in fall 2020.

The ideal candidate for this certificate program is a professional with a bachelor's degree who is not entirely familiar with the principles of GIS and whose workplace has adopted the use of GIS in their daily work, or a professional who is interested in using GIS technology to collect and analyze data in a meaningful way in their field of expertise.

Our current graduate students—professionals from a variety of fields and cultural backgrounds—are from across the U.S. and throughout the world. Students become interested in our programs because they are currently employed in fields using geographic information and desire deeper knowledge of GIS technology, are graduates seeking to launch a career in a GIS-related field, or professionals building a foundation for career advancement through a solid knowledge of GIS science and practice.

GAIN CUTTING-EDGE SPATIAL SKILLS

- Self-paced online program

- Classes designed and taught by full-time faculty and experienced adjunct faculty from Esri

- Access extensive Esri resources

- Earn graduate-level credits applicable toward a master of science in GIS or a master of GIS

- Expand your professional network

GIS CERTIFICATE PROGRAM AT-A-GLANCE

Offered online and on the Redlands campus	4 courses	11-13 credits	32 week program	8 week courses	$956 cost per credit*

The online certificate fee stated is inclusive of a 25% discount applied to our current part-time fee.

REQUIRED COURSE

GIS 610 Fundamentals of Geographic Information, Research, Techniques & Applications (3 credits)

Provides students with the foundation of theoretical and applied skills in GIScience and technology. Students work on a progression of tasks and assignments focused on GIS data collection, manipulation, analysis, output, and presentation. The assignments reinforce the GIS theory and technology concepts introduced through lectures and discussion.

ELECTIVE COURSES (choose 3 from the following):

GIS 662 Geographic Database Management Systems (4 credits)

Provides fundamental theoretical knowledge about information systems, in general, and the unique demands for managing spatial data. Introduces information systems theory and best practices, system design and architecture, and data modeling. Practice application of database theory and methods builds understanding of modern GIS technology.

GIS 663 Remote Sensing and Image Analysis (4 credits)

This course discusses the principles of remote sensing and image analysis. It introduces image data format, acquisition, and interpretation. Additionally, the course covers the subject of electromagnetic radiation principles, remote sensing sensor characteristics, image data classification, and photogrammetry.

GIS 664 GIS for the Web (2 credits)

Practices the skills needed to create GIS applications for the Web and other networks. Through hands-on projects, students will create their own Web GIS application; in-depth discussions of issues that affect Web GIS from network and security concerns to design for focused and effective Web applications.

GIS 667 Programming for GIS with Python (2 credits)

Introduction to programming concepts necessary for GIS: writing simple statements, organizing code, handling user interaction, and incorporating decision-making logic in code. Introduction to object-oriented programming concepts: methods, properties, and event-driven programming.

A LEADER IN SPATIAL EDUCATION

The University of Redlands is a private, nonprofit university with its main campus in Redlands, California—close neighbors and partners with geospatial leader Esri. For more than three decades, the University of Redlands has infused spatial thinking and geographic information science throughout its academic programs—in business, natural sciences, environmental sciences, social sciences, humanities, design, and other disciplines.