## UNIVERSITY OF REDLANDS GIS PATHWAY PROGRAM

## INTRODUCTION

According to the US Department of Labor, geospatial technology is one of high growth industries due to its diverse applications in environmental conservation, urban planning, emergency management, public health, business, transportation, and much more. To respond to the rising demand in geospatial skills, the University of Redlands offers an internal GIS pathway program that allows the University undergraduates who want to pursue GIS as a future career path to earn a master's degree in GIS within a year after they complete their undergraduate degree at Redlands.

#### MS GIS AND MGIS PROGRAMS

The Department of Geographic Information Science offers two master's degree programs: Master of Science in GIS (MS GIS) and Master in GIS (MGIS). Profiting from a close relationship with Esri, the premier GIS software company in the world, both degree programs equip students with the knowledge and tools to apply GIS to real-world problems. Studying and living together, our cohorts become proficient in the latest GIS technology, theory, and applications with a supportive faculty. Many of our alumni are leading GIS analysts, GIS specialists, GIS developers, and GIS project managers in various private and public organizations. The residential program also provides a great opportunity for building a strong professional network and everlasting friendships.

## WHY THE GIS PATHWAY PROGRAM AT REDLANDS?

The GIS pathway curriculum is designed with a focus on balancing both geographic information science and the cutting-edge geospatial technologies that are suitable for beginners. By following the pathway program curriculum, undergraduates will gain a solid understanding of geographic principles, greatly improve their technical skills in using GIS software, and enhance their problem-solving capabilities through learning various applications of GIS, enabling them to have a smooth transition to our highly reputable GIS graduate programs and obtain their master's degree during their fifth year at Redlands.

# RELATIONSHIP WITH THE SPATIAL STUDIES MINOR

The Spatial Studies Minor is an interdisciplinary program, which focuses on developing and applying spatial thinking in creative ways for research and studies in various academic fields. The Spatial Studies Minor curriculum includes a diverse choice of the electives from various disciplines such as environmental science, natural sciences, humanities, and social sciences. In comparison, the GIS pathway program curriculum only contains the classes that largely focus on GIS fundamentals and technical skills. In addition, the pathway students will have opportunities to work with the faculty of the GIS Department and take Esri trainings through Department's arrangement. Through careful advising, the requirements for the GIS pathway can be fulfilled within the Spatial Studies Minor.

The Spatial Studies Minor students who did not take the pathway program are encouraged to apply for the MS GIS or MGIS program through the regular application procedure. Check gis.redlands.edu for more information.

## WHO CAN APPLY

Any senior with a minimum GPA of 2.7 is eligible to apply for the GIS Pathway program.

## WHEN TO APPLY

The application deadline is the end of the Fall semester of the senior year. Once the students are enrolled in the pathway program, a GIS advisor from the GIS Department will be assigned.

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#### HOW TO APPLY

- Complete the online <u>Intention to Apply Form</u> (optional)
  - Open to all University undergraduates
  - o Students will be invited to the activities hosted by the GIS Department.
- Complete the online GIS Pathway Application
  - Only open to University seniors who have a minimum 2.7 GPA
  - o Conditional admission will be sent to qualified seniors.

## REQUIREMENTS FOR ACCEPTANCE TO THE MS GIS AND MGIS PROGRAMS

The students who fulfill the following requirements will be offered an admission to the Master's degree program of their choice.

- A bachelor's degree with a minimum 3.0 GPA
- A grade of 3.0 or above in each of the Pathway courses

#### **CURRICULUM PLAN**

The pathway program curriculum includes one required course and three electives.

- Required Couse
  - o SPA 110 Introduction to Spatial Analysis and GIS (Fall & Spring)
- Take **one** elective from Category I\*
  - o SPA 210 Advanced Spatial Analysis & GIS (Spring)
  - o EVST 205 Great Environmental Disasters (Fall)
  - o HIST 251 Mapping African History (Spring)
  - o EVST 350 Environmental Design Studio II (TBD)
  - o EVST 351 PanaMapping: GIS in the Jungle (May Term)
  - o EVST 391 Environmental Hydrology (Spring)
  - o SOAN 305 Mapping People Mapping Place (Spring)
  - o BUS 351 GIS & Spatial Analysis for Orgs (Spring)
  - \* Other classes with a GIS component may be approved as a Category I elective.
- Take two electives from Category II or one from Category II plus a summer GIS internship\*
  - o SPA 425 Remote Sensing Image Analysis (Spring)
  - o GIS 411 Fundamentals of Geographic Information, Research, and Applications (Fall & Spring)
  - o GIS 467 Introduction to Programming for GIS (Fall & Spring)
  - \* The students who complete GIS 411 and GIS 467 with a minimum GPA of 3.0 are eligible to waive GIS 611 and GIS 667 required by the Master's program. They will then be able to take additional electives.

#### **Bulldog Scholarship**

The GIS pathway students are eligible to apply for a special GIS scholarship available only to graduates of the University of Redlands.

## **Department Contacts**

For any questions, please contact the Department Chair, Dr. Fang Ren, at <u>fang\_ren@redlands.edu</u> or 909-748-8594, or the Department Coordinator, Andrea Alvarado at <u>msgis@redlands.edu</u> or 909-748-8128.

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## SUGGESTED ACADEMIC PLANS

In order to complete the required courses, students need to make their academic plans before their senior year. Below are the 4-year, 3-year, and 2-year plan examples. Students will work in collaboration with their CAS advisor and their GIS advisor to customize an academic plan.

#### **4-YEAR PATHWAY**

This plan is suggested for freshmen who are interested in learning spatial literacy in their first year.

Year 1 – FA	SPA 100	
Year 2 – FA	SPA 110	
Year 2 – SP	SPA 210   EVST 205   HIST 251	
Year 3 – SP	SPA 425   EVST 391   SOAN 305   BUS 351	
Year 3 – May	EVST 351	
Year 4 – FA	GIS 411	Apply for GIS Pathway Program
Year 4 – SP	GIS 467	

#### **3-YEAR PATHWAY**

This plan is suggested for sophomores who want to complete the pathway program in three years.

YEAR -SEMESTER	AVAILABLE COURSE(S	)
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Year 1 – FA	SPA 110	
Year 1 – SP	SPA 210	
Year 2 – SP	SPA 425   EVST 391   SOAN 305   BUS 351	
Year 2 – May	EVST 351	
Year 3 – FA	GIS 411	Apply for GIS Pathway Program
Year 3 – SP	GIS 467	

## 2-YEAR PATHWAY

This plan is suggested for juniors who have two years to complete the course requirements.

## YEAR -SEMESTER AVAILABLE COURSE(S)

Year 1 – FA	SPA 110	
Year 1 – SP	SPA 210   SOAN 305   BUS 351   EVST 391	
Year 1 – May	EVST 351	
Year 2 – FA	GIS 411	Apply for GIS Pathway Program
Year 2 – SP	GIS 467	