Date Submitted: 10/27/23 1:54 pm

# Viewing: **GISTCP : Geospatial Technologies**

# **Undergraduate Certificate**

Last approved: 10/27/22 4:53 pm

## Last edit: 12/05/23 11:29 am

Changes proposed by: jatullis

Catalog Pages Using this Program <u>Geosciences (GEOS)</u>

Submitter: <u>479-575-3701</u> <del>575-</del> <del>8784</del>	User ID:	<u>rcc003</u> <del>jatullis</del>	Phone:
Program Status	Active		
Academic Level	Undergrad	luate	
Type of proposal	Certificate		
Select a reason for this modification Changing CIP Code of an Existing Certificate or Major(LON)			
Effective Catalog Year	Fall 2024		
College/School Code Fulbright College of Arts and Sciences (ARSC)			
Department Code Department of Geosciences (GEOS)			
Program Code	GISTCP		
Degree	Certificate	of Proficiency	
CIP Code			

## In Workflow

- **1. ARSC Dean Initial**
- 2. Provost Initial
- 3. Director of Curriculum Review and Program Assessment
- 4. Registrar Initial
- 5. Institutional Research

- 6. GEOS Chair
- 7. ARSC Curriculum Committee
- 8. ARSC Dean
- 9. Global Campus
- **10. Provost Review**
- 11. Undergraduate Council
- 12. Faculty Senate
- 13. Provost Final
- Provost's Office- Documentation sent
   to System Office
- 15. Higher Learning Commission
- 16. Board of Trustees
- 17. ADHE Final
- Provost's Office--Notification of Approval
- 19. Registrar Final
- 20. Catalog Editor Final

## **Approval Path**

1. 03/17/23 6:39 pm David McNabb (dmcnabb):

### Program Management

Approved for ARSC Dean Initial

- 2. 03/17/23 6:51 pm Jim Gigantino (jgiganti): Approved for Provost Initial
- 3. 03/20/23 10:07 am Alice Griffin (agriffin): Rollback to Initiator
- 4. 04/07/23 12:34 am David McNabb (dmcnabb): Approved for ARSC Dean Initial
- 5. 04/07/23 10:33 am Jim Gigantino (jgiganti): Approved for Provost Initial
- 6. 04/07/23 2:41 pm
  Alice Griffin
  (agriffin): Approved
  for Director of
  Curriculum Review
  and Program
  Assessment
- 7. 04/12/23 9:55 am Gina Daugherty (gdaugher): Approved for Registrar Initial
- 8. 04/12/23 10:11 am Doug Miles (dmiles): Approved for Institutional Research
- 9. 08/16/23 10:47 am Lisa Kulczak (Ikulcza): Rollback to Initiator

### Program Management

- 10. 10/27/23 2:12 pm Christopher Liner (liner): Approved for ARSC Dean Initial
- 11. 10/29/23 7:17 pmJim Gigantino(jgiganti): Approvedfor Provost Initial
- 12. 11/01/23 12:36 am Lisa Kulczak (Ikulcza): Approved for Director of Curriculum Review and Program Assessment
- 13. 11/01/23 7:30 amGina Daugherty(gdaugher):Approved forRegistrar Initial
- 14. 11/01/23 12:46 pm Doug Miles (dmiles): Approved for Institutional Research
- 15. 11/06/23 2:36 pm Jason Tullis (jatullis): Approved for GEOS Chair
- 16. 11/14/23 11:37 amNik Rowan(nrgreen): Approvedfor ARSC CurriculumCommittee
- 17. 11/14/23 1:15 pm Christopher Liner (liner): Approved for ARSC Dean
- 18. 11/14/23 1:18 pm Suzanne Kenner

(skenner): Approved for Global Campus 19. 11/14/23 1:21 pm Jim Gigantino (jgiganti): Approved for Provost Review 20. 12/20/23 3:11 pm Lisa Kulczak (Ikulcza): Approved for Undergraduate Council

## History

- 1. Apr 27, 2015 by Lisa Kulczak (Ikulcza)
- 2. Apr 27, 2015 by Lisa Kulczak (lkulcza)
- 3. Apr 27, 2015 by Lisa Kulczak (Ikulcza)
- 4. Oct 27, 2022 by Jason Tullis (jatullis)

# <u>30.4401</u> 45.0702 - <u>Geography and Environmental Studies</u>. Geographic Information Science and Cartography.

Program Title

Geospatial Technologies Undergraduate Certificate

Program Delivery

Method

Online/Web-based

Is this program interdisciplinary?

No

Does this proposal impact any courses from another College/School?

No

What are the total 12-18

hours needed to

complete the

program?

# **On-line/Web-based Information**

Reason for offering Web-based Program already provided	
Maximum Class Size for Web-based Courses	already provided
Course delivery	Method(s)
mode	Online
Class interaction	Method(s):
mode	E-mail
Percent Online 100% 100% with No Requir Provide a List of Services Supplied by Consortia Partners or	red Campus Component
Outsourced Organization na	
Estimate Costs of the Program over the First 3 Years	na
List Courses Taught by Adjunct Faculty	
Upload Memorandum of Understanding Forms (if required)	

# **Program Requirements and Description**

Requirements

## **Requirements for Geospatial Technologies Certificate**

The Department of Geosciences also offers an online Geospatial Technologies Certificate through the University of Arkansas <u>Global Campus</u>. The certificate is designed for working professionals who wish to develop basic skills in the emerging field of geospatial technologies. Instruction prepares these individuals for employment in the geosciences and collateral disciplines as well as providing a foundational skill set for additional advanced work if desired. The certificate will also benefit students in two-year associate degree programs as well as undergraduates in four-year programs who wish to strengthen their skills.

**Requirements for admission:** Candidates should posses an associate's degree, two years of college, or equivalent work experience.

**Requirements for a Geospatial Technologies Certificate:** Students must complete the following 18 credit hours, but it is possible to waive <u>GEOS 30103 and GEOS 31003 (up</u> GEOS 3013) and <u>GEOS 3103</u> (up to 6 credit hours) through successful completion of proficiency exams.

GEOS 3543	Course GEOS 3543 Not Found	<del>3</del>
or GEOS 3733	Course GEOS 3733 Not Found	
GEOS 3013	Course GEOS 3013 Not Found	<del>3</del>
GEOS 3103	Course GEOS 3103 Not Found	<del>3</del>
<del>GEOS 3553</del>	Course GEOS 3553 Not Found	<del>3</del>
GEOS 3563	Course GEOS 3563 Not Found	<del>3</del>
<del>GEOS 3593</del>	Course GEOS 3593 Not Found	<del>3</del>
<u>GEOS 35403</u>	Geospatial Applications and Information Science	<u>3</u>
<u>or GEOS 37303</u>	Geospatial Data Science in Public Health	
<u>GEOS 30103</u>	Foundations of Geospatial Data Analysis	<u>3</u>
<u>GEOS 31003</u>	Geospatial Technologies Computational Toolkit	<u>3</u>
<u>GEOS 35503</u>	Spatial Analysis Using ArcGIS	<u>3</u>
<u>GEOS 35603</u>	Geospatial Data Mining	<u>3</u>
<u>GEOS 35903</u>	Introduction to Geodatabases	<u>3</u>
Total Hours		18

8-Semester Plan

Are Similar Programs available in the area?

No

Objectives

Estimated Student	already provided
Demand for Program	
Scheduled Program Review Date	2028-2029
Program Goals and	

### **Program Goals and Objectives**

Two primary sources define the skills and technical content of educational programs in the geospatial area. These are the Department of Labor's Geospatial Competency Model (2019) and the University Consortium for Geographic Information Science's (UCGIS) Body of Knowledge (2023). The certificate is designed to provide the skills needed to effectively execute the responsibilities of the "mapping technician" and to also serve as foundational skills for additional education and advanced employment. It is expected that students enrolling will include individuals already employed who wish to increase their skill sets in this area, recent graduates of associate degree programs from community colleges, and undergraduates who wish to develop these skills but do not have access to these educational opportunities. already provided

### Learning Outcomes

### Learning Outcomes

Students will be prepared to effectively perform the duties of the mapping technician as defined by the U.S. Department of Labor. These include selection of geospatial data required for mapping, editing and processing of geospatial images, and assisting cartographers and photogrammetrists to produce and update a variety of terrain and other maps. They will be able to perform the critical work functions defined in the Geospatial Competency Model's areas of: (a) Earth geometry (b) data quality and (c) geographic information systems. already provided

### Description and justification of the request

Description of specific change	Justification for this change
Changing CIP code from 45.0702 Geographic Information	Effective 2020, the National Center for Education
Science and Cartography to 30.4401 Geography and	Statistics recently established a new Classification
Environmental Studies.	of Instructional Programs (CIP) code for
	"Geography and Environmental Studies" which
	better captures the geography teaching, research
	and service strengths developed in recent
	decades at University of Arkansas. For example,
	the new CIP code recognizes "climate science,
	sustainability, environmental science and policy,
	research methods, geographic information
	systems (GIS), human geography, physical
	geography, remote sensing, and public policy".

Description of specific change	Justification for this change	
	The online geospatial certificates were previously	
	coded as "Geographic Information Science and	
	Cartography" which certainly captured a large	
	part of what the certificates focus on. However,	
	the new geography code which encompasses	
	technical geography makes the most sense in	
	terms of a) providing a strong geography and	
	environmental studies context for the certificates	
	(which simply reflects the reality of these	
	studies), and b) meet ADHE viability requirements	
	by combining the certificate with the bachelor's	
	and master's degrees in geography.	

Upload attachments

<u>GISTCP - Changing CIP Code - Ltr of Notification.pdf</u> <u>GISTCP - CIP Code Change - Ltr of Notification\_Rev\_BOT.pdf</u>

**Reviewer Comments** 

Alice Griffin (agriffin) (03/20/23 10:07 am): Rollback: Please identify program goals and student learning outcomes for the CP.

Alice Griffin (agriffin) (04/07/23 2:41 pm): Inserted anticipated approval dates into the Letter of Notification. Renamed document to match BOT naming convention.

**Gina Daugherty (gdaugher) (04/12/23 9:55 am):** Removed Undergraduate Council from workflow.

**Gina Daugherty (gdaugher) (04/12/23 1:04 pm):** Added Undergraduate Council to workflow that was inadvertently removed.

**Lisa Kulczak (lkulcza) (08/16/23 10:47 am):** Rollback: Per request from chair; revisiting the proposed CIP code for this certificate.

Lisa Kulczak (lkulcza) (11/01/23 12:34 am): Uploaded revised LON for new approval dates.

Key: 571