GEOGRAPHY, APPLIED (BS)



This program was approved for students entering the university in the Summer 2025-Spring 2026 catalog year. For more information about catalog year, go to Catalog Year Information (https://catalog.louisville.edu/undergraduate/university-wide-unit-specific-policies/catalog-year/).

Bachelor of Science in Applied Geography

Unit: College of Arts and Sciences (http://www.louisville.edu/a-s/) (AS) Department: Geographic and Environmental Sciences (https://louisville.edu/geogeo/)

Academic Plan Code(s): See Track Requirements tab

Program Information

Geographers investigate the character and possible associations between a subject and its environment. The Department of Geographic and Environmental Sciences educates students to view the world in a spatial and time-dependent context to determine relationships between people and their immediate and global environment.

The department offers Bachelor of Science degrees in five different tracks:

- Environmental Sciences: designed for students who are interested in the environment and environmental sustainability.
- Geospatial Technologies: designed for students who are interested in developing geospatial technologies like GIS and remote sensing.
- Human and Cultural Dynamics: designed for students interested in the forces that shape human environments like population trends, sustainable development, ethnic and racial segregation, globalization and geopolitics.
- Meteorology: designed for students interested in operational meteorology and meets NOAA requirements to work for the National Weather Service.
- Urban Analytics: designed for students interested in using data science and geospatial technologies to analyze processes that shape urban environments and solve urban problems.

Completion of this degree requires work to be submitted for the department's Learning Outcomes Measurement. For details, contact the department.

Degree Summary

Code	litle	Hours
General Educatio	n Requirements (https://catalog.louisville.edu/	31

General Education Requirements (https://catalog.louisville.edu/undergraduate/general-education-requirements/) 1

Minimum Total Hours	121
Supporting Courses	6-26
Track Requirements	24-30
Program/Major Requirements ¹	30
College/School Requirements	13-15

Some credit hours from the General Education Requirements may be satisfied by courses defined by the program, in which case additional electives will be required to complete the minimum hours for the degree.

Specific coursework information can be found on the Degree Requirements tab.

Accelerated BS/MS in Applied Geography

The Department of Geographic and Environmental Sciences offers an accelerated BS/MS program in which exceptional majors in any of the BS Applied Geography degree tracks may earn up to 9 graduate-level credit hours (at either the 500 or 600 level) during their Senior year. These graduate-level courses are then counted towards both the BS and MS Applied Geography degrees, allowing students to go on and complete the graduate degree with the remaining graduate hours, saving both time and expense. If enrolling full time in the graduate program, students may graduate with the MS Applied Geography degree in as little as 2-3 semesters, instead of the usual 4.

Undergraduate students interested in participating in an accelerated dual bachelor's/ master's degree offered through the Soaring Scholar (https://graduate.louisville.edu/academics/programs/soaring/) program must first meet with their Academic Advisor and be accepted into the program. Once accepted, students will receive an official admission letter outlining program policies and details. They will then work with their department and academic advisor to register for classes each semester, ensuring they meet the milestones and academic progress requirements of the Soaring Scholar program. A Soaring Scholar student is considered an undergraduate student until their bachelor's degree is conferred. In their final undergraduate semester, they are expected to apply for admission to their respective master's program.

Departmental Admission Requirements

There are no specific admission requirements for students in the traditional degree plan. The Change Major Request form can be found under the Academic Progress tile on ULink.

Admission and Application to the Accelerated BS/MS Applied Geography Soaring Scholars Program

Students interested in applying to the BS/MS Applied Geography Soaring Scholars program should follow the application process outlined in the Soaring Scholars Application Checklist (https://graduate.louisville.edu/academics/programs/soaring/).

The minimum requirements for the BS/MS Applied Geography Soaring Scholars program are listed in the Soaring Scholars Application Checklist (https://graduate.louisville.edu/academics/programs/soaring/)

Admission to a Soaring Scholar program does not guarantee admission into the associated master's degree program. Soaring Scholar students must apply to the associated graduate program in their last semester,

Hours

6-26



before graduating with the bachelor's degree, to be considered for the Accelerated Master's graduate program. They must meet all the requirements for admission to the graduate program at the time of application to be admitted. Learn more about the graduate admissions process (https://graduate.louisville.edu/admission/apply/) and admission requirements for the Applied Geography Master's program (https://catalog.louisville.edu/graduate/programs-study/master-science-applied-geography/#text).

General Education Requirements

(Code	Title	Hours
		n Requirements (https://catalog.louisville.edu/ eneral-education-requirements/) ¹	31
	•	rses are required by the program and can satisfy neral Education Requirement:	
	GEOG 200	Human Geography in a Changing World - D2 (https://catalog.louisville.edu/undergraduate/general-education-requirements/), SB (https://catalog.louisville.edu/undergraduate/general-education-requirements/)	
	GEOG 300	Globalization and Diversity - D2 (https://catalog.louisville.edu/undergraduate/generaleducation-requirements/), SB (https://catalog.louisville.edu/undergraduate/generaleducation-requirements/)	
	ENVS 200	The Global Environment - S (https://catalog.louisville.edu/undergraduate/generaleducation-requirements/)	

* Meteorology track also requires ENVS 220/PHYS 220, PHYS 295, PHYS 298 and MATH 205.

All degrees require the completion of the University-wide General Education Program (link provided above). Some General Education requirements may be met in the requirements for the major or supporting coursework, in which case additional electives may be required to complete the minimum hours for the degree.

College/School Requirements

Code	Title	Hours
Arts & Sciences R	Requirements	
GEN 100	Student Success Center First Year Experience	1
or GEN 101	Arts & Sciences First Year Experience	
Foreign Language	e ²	6-8
Electives in Natur	al Sciences or Humanities at the 300 level or abo	ve 6
WR-two approve	d courses at the 300 level or above ⁴	
Minimum Total Ho	ours	13-15

Program/Major Requirements

	Code	litle	Hours
Department of Geography and Environmental Sciences			
	ENVS 200	The Global Environment - S (https://catalog.louisville.edu/undergraduate/generaleducation-requirements/)	3
	ENVS 363	Climate Science	3

Track Requirement	nts (see Track Requirements tab)	24-30
Code	Title	Hours
Minimum Total H	ours	30
GEOG 558	Introduction to Geographic Information Systems	3
GEOG 442	Senior Thesis - CUE (https://catalog.louisville.edundergraduate/general-education-requirements/ WR (https://catalog.louisville.edu/undergraduategeneral-education-requirements/) 4	′),
GEOG 441	Senior Thesis Proposal - WR (https://catalog.louisville.edu/undergraduate/general-education-requirements/) 4	3
GEOG 370	Introduction to Field Methods in Geography	3
GEOG 356	Introduction to Spatial Statistics	3
GEOG 300	Globalization and Diversity - D2 (https://catalog.louisville.edu/undergraduate/generaleducation-requirements/), SB (https://catalog.louisville.edu/undergraduate/generaleducation-requirements/)	3
GEOG 256	Introduction to Quantitative Methods in Geography and Geosciences - QR (https:// catalog.louisville.edu/undergraduate/general- education-requirements/)	3
GEOG 200	Human Geography in a Changing World - D2 (https://catalog.louisville.edu/undergraduate/ general-education-requirements/), SB (https:// catalog.louisville.edu/undergraduate/general- education-requirements/)	3

At least 50 of the total minimum hours required must be at the 300 level or above.

Code Title Hours
Culminating Undergraduate Experience (Graduation requirement)

Requirement fulfilled by completing:

Title

Supporting Courses (see Track Requirements tab)

GEOG 442 Senior Thesis - CUE (https://catalog.louisville.edu/undergraduate/general-education-requirements/), WR (https://catalog.louisville.edu/undergraduate/

general-education-requirements/)

Some credit hours from the General Education Requirements may be satisfied by courses defined by the program, in which case additional electives will be required to complete the minimum hours for the degree.

Completion of the second semester of a single foreign language; hours will vary depending on the language taken

- Students in the Meteorology track satisfy this requirement by completing the track. Please consult the Track Requirements tab for more information.
- ⁴ Fulfills WR requirement.



Track Requirements

Track in Meteorology

Academic Plan Code(s): GEOGBS_MET

Code	Title	Hours
ENVS 220	Introduction to Weather and Climate - S (https://catalog.louisville.edu/undergraduate/general-education-requirements/)	/ 3
ENVS 305	Introduction to Weather Analysis	3
ENVS 366	Dynamic Meteorology	3
ENVS 370	Thermodynamic Meteorology	3
ENVS 452	Physical Meteorology	3
ENVS 465	Mesoscale Meteorology	3
ENVS 469	Synoptic Meteorology	3
GEOG 355	Introduction to Remote Sensing	3
Minimum Total H	ours	24

Code	Title	Hours
Supporting Cours	ses for Meteorology	
PHYS 295	Introductory Laboratories I - SL (https://catalog.louisville.edu/undergraduate/general-education-requirements/)	1
PHYS 298	Introductory Mechanics, Heat and Sound - S (https://catalog.louisville.edu/undergraduate/general-education-requirements/)	4
PHYS 299	Introductory Electricity, Magnetism and Light	4
MATH 205	Calculus I - QR (https://catalog.louisville.edu/undergraduate/general-education-requirements	4
MATH 206	Calculus II	4
MATH 325	Introduction to Linear Algebra	3
MATH 405	Differential Equations	3
GEOG 385	Introduction to Programming for GIS and Spatia Data Analysis	l 3

Track in Environmental Sciences

Academic Plan Code(s): GEOGBS_ENV

or ENVS 564 Hydrology

Minimum Electives 1, 2

Minimum Total Hours

Code	Title	Hours
Environmental F	oundation	
ENVS 301	Geology for Scientists and Engineers	3
ENVS 360	Global Environmental Change	3
ENVS 365	Biogeography	3
ENVS 564	Hydrology	3

GEOG 340	Environmental Conflict in the United States: Historical Foundations & Contemporary Problems - D1 (https://catalog.louisville.edu/undergraduate/ general-education-requirements/), SBH (https:// catalog.louisville.edu/undergraduate/general- education-requirements/)	3
GEOG 350	Introduction to Mapping and Geospatial Technologies	3
GEOG 355	Introduction to Remote Sensing	3
Environmental Sp	pecialization	
Select three of th	e following courses:	9
ENVS 367	Geomorphology	
ENVS 565	Natural Hazards	
ENVS 570	Water Resource Management	
ENVS 571	GIS and Water Resources	
GEOG 361	Sustainable Human Environments - WR (https://catalog.louisville.edu/undergraduate/generaleducation-requirements/)	
GEOG 525	Measuring Sustainability: Our Human Planet	
GEOG 540	Geography and Human-Environment Interactions (Select 3)	
Minimum Total H	ours	30

Code Title Hours

Supporting Courses for Environmental Sciences

Electives in Social Sciences, other than Geography, at the 300 level or above

Track in Geospatial Technologies

Academic Plan Code(s): GEOGBS_GST

0-26

26-52

Code	Title	Hours
Geospatial Techn	ologies Foundation	
GEOG 350	Introduction to Mapping and Geospatial Technologies	3
GEOG 355	Introduction to Remote Sensing	3
GEOG 385	Introduction to Programming for GIS and Spatia Data Analysis	l 3
GEOG 545	Unoccupied Aerial Systems and Geospatial Applications	3
GEOG 556	Advanced Remote Sensing	3
GEOG 559	Advanced Geographic Information Systems	3
GEOG 590	Special Topics	3
Geospatial Techn	ologies Specialization	
Select three of th	e following:	9
ENVS 452	Physical Meteorology	
ENVS 571	GIS and Water Resources	
GEOG 522	GIS and Public Health	
GEOG 525	Measuring Sustainability: Our Human Planet	
GEOG 530	Transportation Geography	
GEOG 531	GIS & Urban Demographic Analysis	
GEOG 535	GIS and Retail Site Analysis	

Students who satisfy General Education Requirements by courses defined by the program will require additional electives to complete the minimum hours for the degree.

Some free electives at the 300+ level may be required to reach a minimum of 50 hours at the 300+ level.



GEOG 583	Spatial and Non-Spatial Database Management	
Minimum Total F	lours	30
Code	Title	Hours
Supporting Cour	ses for Geospatial Technologies	
Electives in Social above	al Sciences, other than Geography, at the 300 level	or 6

Track in Human and Cultural Dynamics

Academic Plan Code(s): GEOGBS_HCD

Code	Title	Hours
Human and Cultu	ral Dynamics Foundation	
GEOG 320	Geopolitics	3
GEOG 328	Urban Geography	3
GEOG 331	Population Geography	3
GEOG 340	Environmental Conflict in the United States: Historical Foundations & Contemporary Problem - D1 (https://catalog.louisville.edu/undergradua general-education-requirements/), SBH (https://catalog.louisville.edu/undergraduate/general-education-requirements/)	te/
GEOG 350	Introduction to Mapping and Geospatial Technologies	3
GEOG 360	Qualitative Methods for Undergraduates	3
GEOG 361	Sustainable Human Environments - WR (https://catalog.louisville.edu/undergraduate/general-education-requirements/)	/ 3
Human and Cultu	ral Dynamics Specialization	
Select three of the	e following:	9
GEOG 308	Understanding China: People, Environment and Development	
GEOG 316	Geography of South Asia	
GEOG 324	Race and Place	
GEOG 500	Globalization Seminar	
GEOG 510	Urbanism in the Global South: Cities and Space	
GEOG 521	Medical Geography	
GEOG 524	Food and Race	
GEOG 525	Measuring Sustainability: Our Human Planet	
GEOG 540	Geography and Human-Environment Interaction	S

Minimum Total Hours	30

Global Environmental Change

Code		Title	Hours
_	 _		

Supporting Courses in Human and Cultural Dynamics

Electives in Social Sciences, other than Geography, at the 300 level or above

Track in Urban Analytics

ENVS 360

Academic Plan Code(s): GEOGBS_URA

Code	Title	Hours
Urban Analytics Fo	oundation	
GEOG 324	Race and Place	3
GEOG 327	Economic Geography	3
GEOG 328	Urban Geography	3
GEOG 510	Urbanism in the Global South: Cities and Space	3
GEOG 522	GIS and Public Health	3
GEOG 531	GIS & Urban Demographic Analysis	3
GEOG 559	Advanced Geographic Information Systems	3
Urban Analytics S	pecialization	
Select three of the	following:	9
GEOG 320	Geopolitics	
GEOG 331	Population Geography	
GEOG 340	Environmental Conflict in the United States: Historical Foundations & Contemporary Problem - D1 (https://catalog.louisville.edu/undergraduat general-education-requirements/), SBH (https://catalog.louisville.edu/undergraduate/general-education-requirements/)	
GEOG 355	Introduction to Remote Sensing	
GEOG 360	Qualitative Methods for Undergraduates	
GEOG 361	Sustainable Human Environments - WR (https://catalog.louisville.edu/undergraduate/general-education-requirements/)	
GEOG 529	Geography of Urban Issues	
GEOG 530	Transportation Geography	
GEOG 535	GIS and Retail Site Analysis	
GEOG 545	Unoccupied Aerial Systems and Geospatial Applications	
GEOG 556	Advanced Remote Sensing	
GEOG 590	Special Topics	
Minimum Total Ho	ours	30
Code	Title	Hours
Supporting Course	es in Urban Analysis	-

Electives in Social Sciences, other than Geography, at the 300 level or

Accelerated BS/MS Applied Geography Soaring Scholars Program

Prior to applying to the Accelerated BS/MS Applied Geography Soaring Scholars Program, students should identify up to 9 credit hours at the 500-600 level to complete during their Senior year to count as dual credit towards their current BS and planned MS Applied Geography degree. Students should consult with their academic advisor and the program department's Director of Graduate Studies (https://louisville.edu/geogeo/ about/faculty/) when identifying these dual credit hours. However, enrollment in some or all of the following required foundation courses -GEOG 600, GEOG 656 and GEOG 660 - is strongly encouraged for the dual credit. This will increase flexibility of elective course enrollment later in the MS program and staying on track to graduate with the MS degree in 2-3 semesters instead of the usual 4.

Flight Plan



Track in Environmental Sciences

Academic Plan Code(s): GEOGBS ENV

Social Science Elective (300 level or above)
General Education: Cardinal Core Arts and Humanities

Hours

Environmental Sciences Track Specialization Course

Environmental Sciences Track Specialization Course

Hours

Humanities or Natural Science Elective (300 level or above)

Global Environmental Change

Geology for Scientists and Engineers

Free Elective

Spring ENVS 360

ENVS 301

Year 1		
Fall		Hours
GEN 101	Arts & Sciences First Year Experience	nouis 1
ENGL 101	Introduction to College Writing - WC (https://	3
LINGL TOT	catalog.louisville.edu/undergraduate/general-education-	3
Consuel Education	requirements/) on: Cardinal Core Oral Communication	3
Foreign Language		3-4
ENVS 200	The Global Environment - S (https://catalog.louisville.edu/	3-4
ENV3 200	undergraduate/general-education-requirements/)	3
Free Elective		3
	Hours	16-17
Spring		
ENGL 102	Intermediate College Writing - WC (https:// catalog.louisville.edu/undergraduate/general-education- requirements/)	3
General Education	on: Cardinal Core Arts & Humanities	3
General Education	on: Cardinal Core Natural Science w lab	4
Foreign Languag	ge 2	3-4
GEOG 200	Human Geography in a Changing World - D2 (https:// catalog.louisville.edu/undergraduate/general-education- requirements/), SB (https://catalog.louisville.edu/ undergraduate/general-education-requirements/)	3
	Hours	16-17
Year 2		
Fall		
GEOG 256	Introduction to Quantitative Methods in Geography and Geosciences - QR (https://catalog.louisville.edu/ undergraduate/general-education-requirements/)	3
GEOG 350	Introduction to Mapping and Geospatial Technologies	3
GEOG 370	Introduction to Field Methods in Geography	3
ENVS 365	Biogeography	3
Free Elective		3
Spring	Hours	15
GEOG 356	Introduction to Spatial Statistics	3
GEOG 558	Introduction to Spatial Statistics Introduction to Geographic Information Systems	3
GEOG 340	Environmental Conflict in the United States: Historical Foundations & Contemporary Problems - D1 (https://catalog.louisville.edu/undergraduate/general-education-requirements/), SBH (https://catalog.louisville.edu/undergraduate/general-education-requirements/)	3
ENVS 363	Climate Science	3
Free Elective		3
Year 3	Hours	15
Fall		
GEOG 355	Introduction to Pomoto Soneina	3
ENVS 564	Introduction to Remote Sensing Hydrology	3
LINVO JU4	Tydroidgy	3

Fall		
GEOG 300	Globalization and Diversity - D2 (https:// catalog.louisville.edu/undergraduate/general-education- requirements/), SB (https://catalog.louisville.edu/ undergraduate/general-education-requirements/)	3
GEOG 441	Senior Thesis Proposal - WR (https:// catalog.louisville.edu/undergraduate/general-education- requirements/)	3
Environmental Scie accelerated progra	ences Track Specialization Course (500 level for m)	3
Humanities or Natu accelerated progra	ural Science Elective (300 level or above; 500-600 level for m)	3
Free Elective (500-	600 level for accelerated program)	3
	Hours	15
Spring		
GEOG 442	Senior Thesis - CUE (https://catalog.louisville.edu/	
	undergraduate/general-education-requirements/), WR (https://catalog.louisville.edu/undergraduate/general-education-requirements/)	3
Social Science Elec	(https://catalog.louisville.edu/undergraduate/general-	3
	(https://catalog.louisville.edu/undergraduate/general-education-requirements/)	
Free Elective (500-	(https://catalog.louisville.edu/undergraduate/general- education-requirements/) ctive (300 level or above)	3
Free Elective (500-6	(https://catalog.louisville.edu/undergraduate/general- education-requirements/) stive (300 level or above) 500 level for accelerated program)	3
Free Elective (500-6	(https://catalog.louisville.edu/undergraduate/general- education-requirements/) stive (300 level or above) 600 level for accelerated program) 600 level for accelerated program)	3 3 3

Track in Geospatial Technologies

General Education: Cardinal Core Arts and Humanities

Academic Plan Code(s): GEOGBS GST

year	1
E-11	

3

3

15

3

3

3

3

Year 4

Fall		Hours
GEN 101	Arts & Sciences First Year Experience	1
ENGL 101	Introduction to College Writing - WC (https:// catalog.louisville.edu/undergraduate/general-education- requirements/)	3
General Education	: Hist 101 or 102	3
Foreign Language	1	3-4
ENVS 200	The Global Environment - S (https://catalog.louisville.edu/undergraduate/general-education-requirements/)	3
Free Elective		3
	Hours	16-17
Spring		
ENGL 102	Intermediate College Writing - WC (https:// catalog.louisville.edu/undergraduate/general-education- requirements/)	3
General Education	: Cardinal Core Arts & Humanities - AH	3
General Education	: Cardinal Core Natural Science w lab	4
Foreign Language	2	3-4
GEOG 200	Human Geography in a Changing World - D2 (https://catalog.louisville.edu/undergraduate/general-education-requirements/), SB (https://catalog.louisville.edu/undergraduate/general-education-requirements/)	3
	Hours	16-17
Year 2		
Fall		
GEOG 256	Introduction to Quantitative Methods in Geography and Geosciences - QR (https://catalog.louisville.edu/undergraduate/general-education-requirements/)	3
GEOG 370	Introduction to Field Methods in Geography	3
GEOG 350	Introduction to Mapping and Geospatial Technologies	3



Concrui Luucat	ion: Cardinal Core Oral Communication - OC Hours	3 15
Spring	Houis	13
GEOG 356	Introduction to Spatial Statistics	3
GEOG 558	Introduction to Spatial Statistics Introduction to Geographic Information Systems	3
GEOG 385	Introduction to Geographic information systems Introduction to Programming for GIS and Spatial Data	3
0200 303	Analysis	J
ENVS 363	Climate Science	3
Free Elective		3
	Hours	15
Year 3		
Fall		
GEOG 355	Introduction to Remote Sensing	3
General Educat	ion: Cardinal Core D1	3
Humanities or I	Natural Science Elective (300 level or above)	3
Social Science	Elective (300 level or above)	3
Free Elective		3
	Hours	15
Spring		
GEOG 556	Advanced Remote Sensing	3
Geospatial Tecl	hnologies Track Specialization Course	3
	hnologies Track Specialization Course	3
	hnologies Track Specialization Course	3
	Natural Science Elective (300 level or above)	3
	Hours	15
Year 4		
Fall		
GEOG 300	Globalization and Diversity - D2 (https://	3
	catalog.louisville.edu/undergraduate/general-education-	
	requirements/), SB (https://catalog.louisville.edu/	
	undergraduate/general-education-requirements/)	
GEOG 441	Senior Thesis Proposal - WR (https://	3
	catalog.louisville.edu/undergraduate/general-education- requirements/)	
GEOG 590	Special Topics (Special Topic Web Mapping)	3
	00-600 level for accelerated program)	3
	00-600 level for accelerated program)	3
Tree Elective (o	Hours	15
Spring	riouis	13
GEOG 442	Sonior Thosis - CLIE (https://catalog.louisville.edu/	3
GEUG 442	Senior Thesis - CUE (https://catalog.louisville.edu/ undergraduate/general-education-requirements/), WR	3
	(https://catalog.louisville.edu/undergraduate/general-	
	education-requirements/)	
GEOG 545	Unoccupied Aerial Systems and Geospatial Applications	3
GEOG 559	Advanced Geographic Information Systems	3
Social Science	Elective (300 level or above; 500-600 level for accelerated	3
program)		
Free Elective (if	needed, 500-600 level for accelerated program)	3
	Hours	15
		122-124

Track in Human and Cultural Dynamics

Academic Plan Code(s): GEOGBS HCD

Year 1		
Fall		Hours
GEN 101	Arts & Sciences First Year Experience	1
ENGL 101	Introduction to College Writing - WC (https:// catalog.louisville.edu/undergraduate/general-education- requirements/)	3
General Education	: Cardinal Core Arts & Humanities	3
Foreign Language	1	3-4

ENVS 200	The Global Environment - S (https://catalog.louisville.edu/undergraduate/general-education-requirements/)	3
Free Elective		3
	Hours	16-17
Spring		
ENGL 102	Intermediate College Writing - WC (https:// catalog.louisville.edu/undergraduate/general-education- requirements/)	3
General Education	: Cardinal Core Oral Communication	3
Foreign Language	2	3-4
GEOG 200	Human Geography in a Changing World - D2 (https://catalog.louisville.edu/undergraduate/general-education-requirements/), SB (https://catalog.louisville.edu/undergraduate/general-education-requirements/)	3
Free Elective		3
	Hours	15-16
Year 2		
Fall		
GEOG 256	Introduction to Quantitative Methods in Geography and Geosciences - QR (https://catalog.louisville.edu/undergraduate/general-education-requirements/)	3
GEOG 300	Globalization and Diversity - D2 (https://	3
	catalog.louisville.edu/undergraduate/general-education- requirements/), SB (https://catalog.louisville.edu/ undergraduate/general-education-requirements/)	
GEOG 350	Introduction to Mapping and Geospatial Technologies	3
Humanities/Natur	ral Science Elective (300 level or above)	3
Free Elective		3
	Hours	15
Spring		
GEOG 356	Introduction to Spatial Statistics	3
GEOG 558	Introduction to Geographic Information Systems	3
GEOG 320	Geopolitics	3
	Geopolitics a: Cardinal Core Arts & Humanities US Diversity - AHD1	3
	Geopolitics :: Cardinal Core Arts & Humanities US Diversity - AHD1	3
General Education	·	
General Education	n: Cardinal Core Arts & Humanities US Diversity - AHD1	3
General Education Free Elective Year 3	n: Cardinal Core Arts & Humanities US Diversity - AHD1	3
General Education Free Elective Year 3 Fall	a: Cardinal Core Arts & Humanities US Diversity - AHD1 Hours	3 3 15
General Education Free Elective Year 3 Fall GEOG 331 GEOG 360	Cardinal Core Arts & Humanities US Diversity - AHD1 Hours Population Geography	3 3 15
General Education Free Elective Year 3 Fall GEOG 331 GEOG 360 Human & Cultural	Hours Population Geography Qualitative Methods for Undergraduates	3 3 15 3 3
General Education Free Elective Year 3 Fall GEOG 331 GEOG 360 Human & Cultural Social Science Election	Hours Population Geography Qualitative Methods for Undergraduates Dynamics Track Specialization Course	3 3 15 3 3 3 3
General Education Free Elective Year 3 Fall GEOG 331 GEOG 360 Human & Cultural Social Science Election	Hours Population Geography Qualitative Methods for Undergraduates Dynamics Track Specialization Course extive (300 level or above)	3 15 3 3 3 3 4
General Education Free Elective Year 3 Fall GEOG 331 GEOG 360 Human & Cultural Social Science Election	Hours Population Geography Qualitative Methods for Undergraduates Dynamics Track Specialization Course ective (300 level or above) Cardinal Core Natural Sciences with Lab - B	3 15 3 3 3 3 4
General Education Free Elective Year 3 Fall GEOG 331 GEOG 360 Human & Cultural Social Science Ele General Education	Hours Population Geography Qualitative Methods for Undergraduates Dynamics Track Specialization Course ective (300 level or above) Cardinal Core Natural Sciences with Lab - B	3 3 15 3 3 3 3 4 16
General Education Free Elective Year 3 Fall GEOG 331 GEOG 360 Human & Cultural Social Science Ele General Education Spring GEOG 361	Hours Population Geography Qualitative Methods for Undergraduates Dynamics Track Specialization Course extive (300 level or above) Cardinal Core Natural Sciences with Lab - B Hours Sustainable Human Environments - WR (https://catalog.louisville.edu/undergraduate/general-education-	3 3 15 3 3 3 3 4 16
General Education Free Elective Year 3 Fall GEOG 331 GEOG 360 Human & Cultural Social Science Ele General Education Spring GEOG 361 Human & Cultural	Hours Population Geography Qualitative Methods for Undergraduates Dynamics Track Specialization Course tective (300 level or above) Cardinal Core Natural Sciences with Lab - B Hours Sustainable Human Environments - WR (https://catalog.louisville.edu/undergraduate/general-education-requirements/)	3 3 15 3 3 3 4 16
General Education Free Elective Year 3 Fall GEOG 331 GEOG 360 Human & Cultural Social Science Ele General Education Spring GEOG 361 Human & Cultural	Hours Population Geography Qualitative Methods for Undergraduates Dynamics Track Specialization Course extive (300 level or above) Cardinal Core Natural Sciences with Lab - B Hours Sustainable Human Environments - WR (https://catalog.louisville.edu/undergraduate/general-education-requirements/) Dynamics Track Specialization Course	3 3 15 3 3 3 4 16
General Education Free Elective Year 3 Fall GEOG 331 GEOG 360 Human & Cultural Social Science Ele General Education Spring GEOG 361 Human & Cultural Human & Cultural GEOG 370	Hours Population Geography Qualitative Methods for Undergraduates Dynamics Track Specialization Course ective (300 level or above) Cardinal Core Natural Sciences with Lab - B Hours Sustainable Human Environments - WR (https://catalog.louisville.edu/undergraduate/general-education-requirements/) Dynamics Track Specialization Course Dynamics Track Specialization Course Dynamics Track Specialization Course	3 3 15 3 3 3 4 16
General Education Free Elective Year 3 Fall GEOG 331 GEOG 360 Human & Cultural Social Science Ele General Education Spring GEOG 361 Human & Cultural Human & Cultural GEOG 370 Humanities/Natural	Hours Population Geography Qualitative Methods for Undergraduates Dynamics Track Specialization Course extive (300 level or above) Cardinal Core Natural Sciences with Lab - B Hours Sustainable Human Environments - WR (https://catalog.louisville.edu/undergraduate/general-education-requirements/) Dynamics Track Specialization Course Dynamics Track Specialization Course Introduction to Field Methods in Geography	3 3 15 3 3 3 4 16 3 3 3 3
General Education Free Elective Year 3 Fall GEOG 331 GEOG 360 Human & Cultural Social Science Ele General Education Spring GEOG 361 Human & Cultural	Hours Population Geography Qualitative Methods for Undergraduates Dynamics Track Specialization Course ective (300 level or above) Cardinal Core Natural Sciences with Lab - B Hours Sustainable Human Environments - WR (https://catalog.louisville.edu/undergraduate/general-education-requirements/) Dynamics Track Specialization Course Dynamics Track Specialization Course Introduction to Field Methods in Geography al Science Elective (300 level or above)	3 3 15 3 3 3 4 16 3 3 3 3 3 3
General Education Free Elective Year 3 Fall GEOG 331 GEOG 360 Human & Cultural Social Science Ele General Education Spring GEOG 361 Human & Cultural GEOG 370 Humanities/Natur Year 4 Fall	Hours Population Geography Qualitative Methods for Undergraduates Dynamics Track Specialization Course ective (300 level or above) Cardinal Core Natural Sciences with Lab - B Hours Sustainable Human Environments - WR (https://catalog.louisville.edu/undergraduate/general-education-requirements/) Dynamics Track Specialization Course Dynamics Track Specialization Course Introduction to Field Methods in Geography al Science Elective (300 level or above) Hours	3 3 15 3 3 3 3 4 16 3 3 3 3 3 15
General Education Free Elective Year 3 Fall GEOG 331 GEOG 360 Human & Cultural Social Science Ele General Education Spring GEOG 361 Human & Cultural	Hours Population Geography Qualitative Methods for Undergraduates Dynamics Track Specialization Course ective (300 level or above) Cardinal Core Natural Sciences with Lab - B Hours Sustainable Human Environments - WR (https://catalog.louisville.edu/undergraduate/general-education-requirements/) Dynamics Track Specialization Course Dynamics Track Specialization Course Introduction to Field Methods in Geography al Science Elective (300 level or above)	3 3 15 3 3 3 3 4 16 3 3 3 3 15
General Education Free Elective Year 3 Fall GEOG 331 GEOG 360 Human & Cultural Social Science Ele General Education Spring GEOG 361 Human & Cultural Human & Cultural Human & Cultural Human & Cultural GEOG 370 Humanities/Natur Year 4 Fall GEOG 328 GEOG 441	Hours Population Geography Qualitative Methods for Undergraduates Dynamics Track Specialization Course ective (300 level or above) Cardinal Core Natural Sciences with Lab - B Hours Sustainable Human Environments - WR (https://catalog.louisville.edu/undergraduate/general-education-requirements/) Dynamics Track Specialization Course Dynamics Track Specialization Course Introduction to Field Methods in Geography al Science Elective (300 level or above) Hours Urban Geography Senior Thesis Proposal - WR (https://catalog.louisville.edu/undergraduate/general-education-reduction-red	3 3 15 3 3 3 3 4 16 3 3 3 3 15
General Education Free Elective Year 3 Fall GEOG 331 GEOG 360 Human & Cultural Social Science Ele General Education Spring GEOG 361 Human & Cultural Human & Cultural Human & Cultural GEOG 370 Humanities/Natur Year 4 Fall GEOG 328 GEOG 441 Social Science Ele program) Free Elective (500	Hours Population Geography Qualitative Methods for Undergraduates Dynamics Track Specialization Course ective (300 level or above) Cardinal Core Natural Sciences with Lab - B Hours Sustainable Human Environments - WR (https://catalog.louisville.edu/undergraduate/general-education-requirements/) Dynamics Track Specialization Course Dynamics Track Specialization Course Introduction to Field Methods in Geography al Science Elective (300 level or above) Hours Urban Geography Senior Thesis Proposal - WR (https://catalog.louisville.edu/undergraduate/general-education-requirements/) ective (300 level or above; 500-600 level for accelerated	3 3 15 3 3 3 3 4 16 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
General Education Free Elective Year 3 Fall GEOG 331 GEOG 360 Human & Cultural Social Science Ele General Education Spring GEOG 361 Human & Cultural Human & Cultural Human & Cultural GEOG 370 Humanities/Natur Year 4 Fall GEOG 328 GEOG 441 Social Science Ele program) Free Elective (500	Hours Population Geography Qualitative Methods for Undergraduates Dynamics Track Specialization Course extive (300 level or above) Cardinal Core Natural Sciences with Lab - B Hours Sustainable Human Environments - WR (https://catalog.louisville.edu/undergraduate/general-education-requirements/) Dynamics Track Specialization Course Dynamics Track Specialization Course Introduction to Field Methods in Geography al Science Elective (300 level or above) Hours Urban Geography Senior Thesis Proposal - WR (https://catalog.louisville.edu/undergraduate/general-education-requirements/) ective (300 level or above; 500-600 level for accelerated	3 3 15 3 3 3 3 4 16 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3



Spring		
GEOG 340	Environmental Conflict in the United States: Historical Foundations & Contemporary Problems - D1 (https://catalog.louisville.edu/undergraduate/general-education-requirements/), SBH (https://catalog.louisville.edu/undergraduate/general-education-requirements/)	3
GEOG 442	Senior Thesis - CUE (https://catalog.louisville.edu/ undergraduate/general-education-requirements/), WR (https://catalog.louisville.edu/undergraduate/general- education-requirements/)	3
ENVS 363	Climate Science	3
Free Elective (500	-600 level for accelerated program)	3
Free Elective (if n	eeded, 500-600 level for accelerated program)	3
	Hours	15
	Minimum Total Hours	122-124

Track in Meteorology

Academic Plan Code(s): GEOGBS MET

Year 1		
Fall		Hours
GEN 101	Arts & Sciences First Year Experience	1
ENGL 101	Introduction to College Writing - WC (https:// catalog.louisville.edu/undergraduate/general-education- requirements/)	3
GEOG 200	Human Geography in a Changing World - D2 (https://catalog.louisville.edu/undergraduate/general-education-requirements/), SB (https://catalog.louisville.edu/undergraduate/general-education-requirements/)	3
ENVS 220	Introduction to Weather and Climate - S (https://catalog.louisville.edu/undergraduate/general-education-requirements/)	3
MATH 205	Calculus I - QR (https://catalog.louisville.edu/ undergraduate/general-education-requirements/)	4
Free Elective		1
	Hours	15
Spring		
ENGL 102	Intermediate College Writing - WC (https:// catalog.louisville.edu/undergraduate/general-education- requirements/)	3
MATH 206	Calculus II	4
ENVS 200	The Global Environment - S (https://catalog.louisville.edu/undergraduate/general-education-requirements/)	3
PHYS 295	Introductory Laboratories I - SL (https:// catalog.louisville.edu/undergraduate/general-education- requirements/)	1
PHYS 298	Introductory Mechanics, Heat and Sound - S (https://catalog.louisville.edu/undergraduate/general-education-requirements/)	4
	Hours	15
Year 2 Fall		
GEOG 256	Introduction to Quantitative Methods in Geography and Geosciences - QR (https://catalog.louisville.edu/undergraduate/general-education-requirements/)	3
GEOG 558	Introduction to Geographic Information Systems	3
ENVS 305	Introduction to Weather Analysis	3
PHYS 299	Introductory Electricity, Magnetism and Light	4
General Education	Cardinal Core (OC)	3
	Hours	16
Spring		
ENVS 363	Climate Science	3
ENVS 370	Thermodynamic Meteorology	3
GEOG 356	Introduction to Spatial Statistics	3
General Education: Perspective - SBH	Cardinal Core Social & Behavioral Sciences Historical	3

General Educati	ion: Cardinal Core Arts & Humanities	3
	Hours	15
Year 3		
Fall		
GEOG 355	Introduction to Remote Sensing	3
GEOG 370	Introduction to Field Methods in Geography	3
ENVS 366	Dynamic Meteorology	3
MATH 325	Introduction to Linear Algebra	3
Foreign Langua	ge Level 1	3-4
	Hours	15-16
Spring		
ENVS 465	Mesoscale Meteorology	3
MATH 405	Differential Equations	3
Free Elective		3
Related Elective		3
Foreign Langua	ge Level II	3-4
	Hours	15-16
Year 4		
Fall		
GEOG 300	Globalization and Diversity - D2 (https://	3
	catalog.louisville.edu/undergraduate/general-education-	
	requirements/), SB (https://catalog.louisville.edu/	
	undergraduate/general-education-requirements/)	
GEOG 441	Senior Thesis Proposal - WR (https:// catalog.louisville.edu/undergraduate/general-education-	3
	requirements/)	
ENVS 452	Physical Meteorology	3
General Educati	ion: Cardinal Core Arts & Humanities (AHD1)	3
Free Elective (50	00-600 level for accelerated program)	3
	Hours	15
Spring		
GEOG 442	Senior Thesis - CUE (https://catalog.louisville.edu/	3
	undergraduate/general-education-requirements/), WR	
	(https://catalog.louisville.edu/undergraduate/general-	
	education-requirements/)	
ENVS 469	Synoptic Meteorology	3
	cience Elective (300 level or above depending on if CSE 130 is elective; 500-600 level for accelerated program)	3
Free Elective (5)	00-600 level for accelerated program)	3
General Elective	e (depending on language chosen)	3
	Hours	15
	Minimum Total Hours	121-123

Track in Urban Analytics

Academic Plan Code(s): GEOGBS URA

requirements/)

Year 1		
Fall		Hours
GEN 101	Arts & Sciences First Year Experience	1
ENGL 101	Introduction to College Writing - WC (https:// catalog.louisville.edu/undergraduate/general-education- requirements/)	3
General Educat	tion (Hist 101 or 102)	3
Foreign Langua	age 1	3-4
ENVS 200	The Global Environment - S (https://catalog.louisville.edu/ undergraduate/general-education-requirements/)	3
Free Elective		3
	Hours	16-17
Carina		

Free Elective	Free Elective	
	Hours	16-17
Spring		
ENGL 102	Intermediate College Writing - WC (https://	3



General Education	on: Cardinal Core Arts & Humanities - AH	3
Foreign Language	ge 2	3-4
GEOG 200	Human Geography in a Changing World - D2 (https:// catalog.louisville.edu/undergraduate/general-education- requirements/), SB (https://catalog.louisville.edu/ undergraduate/general-education-requirements/)	3
Free Elective		3
	Hours	15-16
Year 2 Fall		
GEOG 256	Introduction to Quantitative Methods in Geography and Geosciences - QR (https://catalog.louisville.edu/ undergraduate/general-education-requirements/)	3
GEOG 300	Globalization and Diversity - D2 (https:// catalog.louisville.edu/undergraduate/general-education- requirements/), SB (https://catalog.louisville.edu/ undergraduate/general-education-requirements/)	3
GEOG 370	Introduction to Field Methods in Geography	3
General Educati	on: Cardinal Core Oral Communication - OC	3
Free Elective		3
	Hours	15
Spring		
GEOG 356	Introduction to Spatial Statistics	3
GEOG 558	Introduction to Geographic Information Systems	3
GEOG 324	Race and Place Climate Science	3
ENVS 363		3
General Educati	on: Cardinal Core Arts & Humanities	3
v •	Hours	15
Year 3 Fall		
GEOG 327	Economic Geography	3
GEOG 328	Urban Geography	3
	on: Cardinal Core Natural Sciences with Lab - B	4
	Elective (300 level or above)	3
	atural Sciences Elective (300 level or above)	3
	Hours	16
Spring		
GEOG 559	Advanced Geographic Information Systems	3
GEOG 510	Urbanism in the Global South: Cities and Space	3
Urban Analytics	Track Specialization Course	3
Humanities or N	latural Science Elective (300 level or above)	3
General Education	on (D1)	3
	Hours	15
Year 4		
Fall		
GEOG 441	Senior Thesis Proposal - WR (https:// catalog.louisville.edu/undergraduate/general-education- requirements/)	3
GEOG 531	GIS & Urban Demographic Analysis	3
Urban Analytics	Track Specialization Course	3
Urban Analytics	Track Specialization Course	3
Free Elective (50	00-600 level for accelerated program)	3
	Hours	15
Spring		
GEOG 442	Senior Thesis - CUE (https://catalog.louisville.edu/ undergraduate/general-education-requirements/), WR (https://catalog.louisville.edu/undergraduate/general- education-requirements/)	3
GEOG 522	GIS and Public Health	3
Social Science E program)	Elective (300 level or above; 500-600 level for accelerated	3
F · - 5 · - · · · /		

Free Elective (if needed, 500-600 level for accelerated program)	
Hours	15
Minimum Total Hours	122-124

The Flight Plan outlined above is intended to demonstrate one possible path to completing the degree within four years. Course selection and placement within the program may vary depending on course offerings and schedule, elective preferences, and other factors (study abroad, internship availability, etc.). Please consult your advisor for additional information about building a flight plan that works for you.

Degree Audit Report

Degree Audit reports illustrate how your completed courses fulfill the requirements of your academic plan, and which requirements are still outstanding. Degree audits also take transfer credits and test credits into account. "What-if" reports allow you to compare the courses you have completed in your current academic plan to the courses required in another academic plan. Should you have questions about either report, please consult with your academic advisor.

Flight Planner

The Flight Planner tool is available for you to create a personalized Flight Plan to graduation. Advisors have access to review your Flight Planner and can help you adjust it to ensure you remain on track to graduate in a timely manner.

To create these reports:

- 1. Log into your ULink account.
- 2. Click on the Academic Progress tile.
- 3. Select the appropriate report.
 - a. To run a Degree Audit report, click on "View my Degree Audit."
 - b. To create a What-if report, click on "What-if Advisement Report."
 - c. To run a Flight Planner report, click on "Use My Flight Planner."

Click here to run a Degree Audit report, create a What-if report, or run a Flight Planner report. (https://ulink.louisville.edu)