

From: [Smith, Randy](#)
To: [Xiao, Ningchuan](#)
Cc: [Leite, Fabio](#); [Reed, Katie](#); [Smith, Randy](#); [Kwiek, Nicole](#); [Orr, James](#); [Vankeerbergen, Bernadette](#); [Martin, Andrew](#); [King, Ryan](#); [Coleman, Mat](#)
Subject: Proposal to revise the Geographic Information Science minor
Date: Thursday, October 19, 2023 1:36:19 PM
Attachments: [image001.png](#)

Ningchuan:

The proposal from the Department of Geography to revise the undergraduate minor in Geographic Information Science was approved by the Council on Academic Affairs at its meeting on October 18, 2023. Thank you for attending the meeting to respond to questions/comments.

No additional level of internal approval is necessary. This action will be included in the Council's next Annual Activities Report to the University Senate (July 2024).

The Office of the University Registrar will work you with any implementation issues.

Please keep a copy of this message for your file on the proposal and I will do the same for the file in the Office of Academic Affairs.

If you have any questions please contact the Chair of the Council, Professor Fábio Leite(.11), or me.

Randy



W. Randy Smith, Ph.D.

Vice Provost for Academic Programs

Office of Academic Affairs

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From: [Vankeerbergen, Bernadette](#)
To: [Smith, Randy](#); [Reed, Katie](#)
Cc: [Martin, Andrew](#); [Jenkins, Mary Ellen](#); [Ottesen, Jennifer](#); [Steele, Rachel](#)
Subject: Revision to the Undergraduate Minor in Geographic Information Science
Date: Friday, September 15, 2023 3:47:25 PM
Attachments: [gis-minor-revision-proposal.pdf](#)
[image001.png](#)
[Revision Minor Geographic Information Science Letter of Motion.pdf](#)

Dear Randy and Katie,

Please find attached a proposal to revise the Undergraduate Minor in Geographic Information Science. The revision was approved on Friday, September 8, 2023 by the ASC Curriculum Committee (ASCC).

We are now advancing the proposal for review by CAA. The attached documents are: (1) the actual proposal including a cover letter by the Department Chair and (2) the Social and Behavioral Science Subcommittee cover letter to ASCC .

Please use this email as a cover letter indicating that the proposal has been duly reviewed and approved by the appropriate ASC curricular bodies (including the full ASC Curriculum Committee).

The faculty contact for the proposal is Professor Ningchuan Xiao.

Please let me know if you have any questions.

Best regards,
Bernadette



Bernadette Vankeerbergen, Ph.D.

Assistant Dean, Curriculum

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Chair, Arts and Sciences Curriculum Committee

Dear Chair and Members of the Arts and Sciences Curriculum Committee,

On May 4, 2023, the ASCC's Social and Behavioral Sciences Panel reviewed and unanimously approved a proposal from the Department of Geography for changes to their Geographic Information Sciences (GIS) minor. There are four proposed revisions to the GIS minor, as follows:

- 1) A reduction in the total number of credit hours. The current minor requires 18 credits. The revision reduces this to 15 credits, which brings the minor in line with other ASC minors. The reduction in credits is accomplished by reducing the number of required courses from four to three.
- 2) Inclusion of a new course (GEOG 5101) to the list of electives. GEOG 5101 is a newly added course to the curriculum that was designed to develop students' moral compass related to geographic information science and technology.
- 3) Reclassification of GEOG 4103 from a required to elective course. The topics covered in GEOG 4103 (statistical concepts and methods) are available in other courses and/or departments. Therefore, this course does not need to be required for the minor.
- 4) Removal of courses from the minor curriculum. Three courses will no longer be included in the minor because they have either been moved to the 6000 level or are related to specialty areas not at the core of the GIS minor.

The Department of Geography has put together a thorough revision proposal with a clearly articulated rationale and transition plan for the GIS minor. Therefore, we advance the proposal for the revised GIS minor to the Arts and Sciences Curriculum Committee with a motion to approve.

Sincerely,

Christina M. Roup, Ph.D.
Associate Professor



April 5, 2023

Dear ASCC Members,

I'm writing in my capacity as Chair of the Department of Geography. The purpose of this letter is to explain our proposed changes to the Geographic Information Science (GIS) Minor which we are submitting to you for consideration.

Proposed Revisions

We are seeking to (1) change the minimum credit hours for the Minor from 18 to 15 hours, (2) add a new course (GEOG 5101) as an elective, (3) redesignate a required course (GEOG 4103) as an elective, and (4) reduce our choice of electives to focus the minor. These changes are summarized below.

(1) Reduction of total credit hours in the GIS Minor current curriculum

Minimum credit for the Minor is changed from 18 to 15 hours. Due to the change of GEOG 4103 (see #3), the number of required courses for the minor is now changed from 4 to 3, or 9 credit hours. We still require students in the revised GIS Minor to take 2 electives, as with the current curriculum. This effectively brings the total required credit hours down to 15. By removing the other less-central GIS courses from the curriculum (see #4), the revised Minor curriculum is now focused on core knowledges and skills required for a successful career in GIS. The reduction is also in line with other ASC minors that typically require 12 to 15 hours.

(2) New course added to GIS Minor Electives

GEOG 5101 (GIST Professionalism and ethics) is a new course we recently added to our curriculum. This course is designed to help students develop their moral compass in a broad field of geographic information science and technology (GIST). We do not think it should be a required course as some of the topics may be covered in relevant courses in other departments. But as an elective, students can gain substantial understanding of professionalism and ethics in GIST.

(3) Reclassification of courses in the GIS Minor curriculum

GEOG 4103 is moved from the required courses to the electives. This is mainly because the topics covered in GEOG 4103 (fundamental statistical concepts and methods) are commonly available in other departments and students in the GIS Minor can choose to take a statistics or data analysis course from their own department. If their home department does not offer such a course, our GEOG 4103 will be a perfect candidate for them to consider.

(4) Removal of courses from the GIS Minor current curriculum

GEOG 5226 (Spatial Simulation and Modeling in GIS), GEOG 5300 (Geography of Transportation), and GEOG 5402 (Land Use Geography) are no longer included in the revised Minor curriculum because they are either moved to 6000 level (GEOG 5226 will become GEOG 6226 after AU23), or



related to more specialized areas that are not the core of GIS training as deemed by our GIS faculty (GEOG 5300 and 5402).

Implementation Plan

The Department of Geography plans to implement the new curriculum requirements for SP24 semester. Students declaring a GIS Minor on or after SP24 will follow the revised curriculum.

Current students and students enrolled in the GIS Minor before SP24 will use the currently approved curriculum. The reasoning behind this is to uphold a cohort model designed to (1) ensure clear communication of requirements to students based on enrollment term, (2) reduce advising complications caused in transitioning current minors to revised requirement, and (3) avoid disruption to degree planning and progression for current GIS minors. We do not see moving current GIS minors to the revised curriculum as viable. Under the current 18-credit structure, our students are permitted to count to two applicable GEOG courses toward some majors and still meet the required 12 unique credit hours by ASC. Applying a reduced 15 credit hour requirement to current students would reduce their major/minor allowance and adversely impact students who may require additional courses to meet their degree requirement under a changed policy (i.e., majors in Geography, Air Transportation, Atmospheric Science, and Earth Sciences).

Our undergraduate advising staff will advise students of the upcoming changes to the GIS Minor on a case-by-case basis for those considering declaring in SP23 or AU23 to evaluate if they prefer to declare when the revised minor is implemented in SP24 to provide upmost flexibility for student success. I believe the changes outlined above are prudent for our GIS curricula. I have also enclosed the revised and current advising sheets. If you have any questions, please feel free to contact me.

Sincerely,

Mat Coleman

Professor and Chair, Department of Geography, College of Social and Behavioral Sciences
<http://u.osu.edu/coleman.373/>

**The Ohio State University
College of Arts and Sciences**

Geographic Information Science Minor (GIS MN)

Department of Geography
1036 Derby Hall
154 N Oval Mall
Columbus, OH 43210
Tel: (614) 292-2514
Email: geographyadvising@osu.edu
Department website: <http://www.geography.osu.edu/>

Overview

The GIS minor aims to provide fundamental training in GIS that is needed for students from various disciplines to advance their career. The curriculum of the GIS minor is based on that of the GIS major, which includes a diverse range of courses that can be selected by students to count toward the proposed minor degree. These classes will provide students with extensive experience in mapping, geospatial analysis, geospatial modeling, environmental modeling, and statistical methods. Most the courses include a lab companion to give students hands-on training.

Minor Requirements

Effective for students declaring the minor SP16 and beyond.
The minor in GIS requires a minimum of 18 semester credit hours of course work.

Required: 12 hours

Course	Hours	Required Prerequisite
GEOG 4103 *	3	Math 1116 or above
GEOG 5200(S)	3	None
GEOG 5210	3	None
GEOG 5212 *	3	GEOG 5210
OR GEOG 5225		None

Electives: 6 hours

Students must take two elective courses. All courses below may count toward the minor, unless taken as a required course.

Course	Hours	Required Prerequisite
GEOG 5103	3	GEOG 4103 <i>Not open to students w/GEOG 5100</i>
GEOG 5201	3	GEOG 5200(S)
GEOG 5212 *	3	GEOG 5210
GEOG 5222 *	3	GEOG 5210
GEOG 5223 *	3	GEOG 5222
GEOG 5225	3	None
GEOG 5226	3	None
GEOG 5229 *	3	GEOG 5210
GEOG 5300	3	None
GEOG 5402	3	None

Geographic Information Science minor program guidelines

Credit hours required A minimum of 18 credit hours. 1000-level courses shall not be counted in the minor. At least 6 credit hours must be at the 3000-level or above.

Transfer and EM credit hours allowed

A student is permitted to count up to 6 total hours of transfer credit and/or credit by examination.

Overlap with the GE A student is permitted to overlap up to 6 credit hours between the GE and the minor.

Overlap with the major and additional minor(s)

- The minor must be in a different subject than the major.
- The minor must contain a minimum of 12 hours distinct from the major and/or additional minor(s).

Grades required

- Minimum C- for a course to be counted on the minor.
- Minimum 2.00 cumulative GPA for all minor course work.
- Course work graded Pass/Non-Pass cannot count on the minor.
- No more than 3 credit hours of course graded Satisfactory/Unsatisfactory may count toward the minor

X193 credits No more than 3 credit hours.

Minor approval The minor must be approved by the academic unit. Please see the undergraduate advisor for approval.

Filing the minor program form The minor program form must be filed at least by the time the graduation application is submitted to a college/school advisor.

Changing the minor Once the minor program is filed in the college office, any changes must be approved by the academic unit offering the minor. Please see the undergraduate advisor for approval.

College of Arts and Sciences
Curriculum and Assessment Services
306 Dulles, 230 Annie & John Glenn Ave.
<http://artsandsciences.osu.edu>

Received 8/31/12 DH
BV 7/15/14
BV 7/27/15
Rev approved CAA 12-2-15
DH 5/8/17
DH 7-19-18
DH 6-3-19
DH 6-9-21B

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Minor Requirements

Effective for students declaring the minor SP24 and beyond.

The minor in GIS requires a minimum of 15 semester credit hours of course work.

Required: 9 hours

Course	Hours	Required Prerequisite
GEOG 5200	3	None
GEOG 5210	3	None
GEOG 5212	3	GEOG 5210
OR GEOG 5225		None

Electives: 6 hours

Students must take two elective courses. All courses below may count toward the minor, unless taken as a required course.

Course	Hours	Required Prerequisite
GEOG 4103	3	Math 1116 or above
GEOG 5101	3	None
GEOG 5103	3	GEOG 4103 <i>Not open to students w/GEOG 5100</i>
GEOG 5201	3	GEOG 5200(S)
GEOG 5212	3	GEOG 5210
GEOG 5222	3	GEOG 5210
GEOG 5223	3	GEOG 5222
GEOG 5225	3	None
GEOG 5229	3	GEOG 5210

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Credit hours required A minimum of 15 credit hours. 1000-level courses shall not be counted in the minor. At least 6 credit hours must be at the 3000-level or above.

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