

GEOSPATIAL SCIENCE (OSU TRANSFER) EMPHASIS - ASSOCIATE OF SCIENCE (AS)

Program Description

The Geospatial Science Associate of Science degree is designed for students interested in completing the first two years of coursework before transferring to a baccalaureate program in geography, geographic information systems (GIS), geospatial science, geomatics, or similar program. It is specifically aligned with the fully online Bachelor of Science in Geography and Geospatial Science degree at Oregon State University.

Geographic information systems are designed to work with data referenced by spatial or geographic coordinates. GIS is a database with capabilities for spatially referenced data, a set of operations for working with and analyzing the data, and a cartographic system for designing maps.

Graduates can pursue baccalaureate degrees in geography, geospatial science, GIS, and related areas and move to careers in environmental studies, natural resources, federal/state/local governments, planning, utilities, real estate, education, retail, businesses, banking, insurance, and web mapping. Careers typically include positions such as GIS technician, analyst, project manager, computer programmer, database administrator, systems administrator, cartographer, applications developer, and related managerial and administrative roles.

Statewide General Education Student Learning Outcomes

Please see the [General Education page](#) for statewide general education student learning outcomes.

Entrance Requirements

Academic Entrance Requirements

Recommended:

- High school diploma or GED
- Completion of WR 065 Rhetoric and Critical Thinking II or minimum placement Wr/Comm Level 7
- MTH 060 Beginning Algebra or higher or minimum placement Math Level 10
- Completion of computer competency (either IC3 exam or CIS 120 Computer Concepts, which may be taken as part of program)

Additional Program Costs (Beyond Standard Tuition/ Fees and Textbooks)

Material costs

Required:

- Materials (USB drive, maps, office supplies): \$100

Recommended:

- A desktop or laptop computer capable of running GIS software: approximately \$1,200

Most courses use GIS software that is compatible only with Microsoft Windows, and there is no MacOS version. Contact program instructor for specifics.

Course Requirements

Course	Title	Credits
Baccalaureate Core		
Skills		
Fitness:		3
Mathematics: Met by Program Requirements		
Writing I:		4
Writing II:		4
Perspectives Courses		
Biological Science:		4-5
GEOG 107	Human Geography: The Cultural Landscape	4
GEOG 201	World Regional Geography I	4
or GEOG 202	World Regional Geography II	
GEOG 278	Physical Geography: Landforms in Nature	4
or GEOG 279	Physical Geography: From Severe Weather to Climate Change	
or G 202	Geology II - Earth's Surface	
Program Requirements		
GEOG 101	Introduction to Geospatial Science & GIS	4
GEOG 211	Cartography	4
GEOG 265	Geographic Information Systems	4
GEOG 286	Remote Sensing	4
MTH 111Z	Precalculus I: Functions	4
MTH 112Z	Precalculus II: Trigonometry	4
Electives		39
Choose any course numbered 100 or above that brings the total credits to 90 quarter hours.		
Total Credits		90-91

Advising Notes

Most GIS courses are offered once per year beginning in Fall term. Students interested in this degree are advised to consult the program director about which elective courses would best suit their academic and career objectives.

This degree is designed for students planning to pursue a bachelor of science degree in geography, geospatial science, or GIS. Most classes should be transferable to public or private baccalaureate institutions.

OSU is changing its general education requirements from the Bacc Core to new Core Education requirements beginning in Summer 2025. Students who are planning on transferring to OSU and wish to remain under the Bacc Core requirements should do so by Spring 2025. Speak with an OSU advisor for any questions about transferring during this transition period.

Performance Standards

- Academic Requirements:
 - Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
 - All courses in the program must be completed with a grade of C or higher.

Sample Plan

First Year

Fall		Credits
GEOG 101	Introduction to Geospatial Science & GIS	4
GEOG 201 or GEOG 202	World Regional Geography I or World Regional Geography II	4
MTH 111Z	Precalculus I: Functions	4
<u>Writing I:</u>		4
Credits		16

Winter

GEOG 107	Human Geography: The Cultural Landscape	4
MTH 112Z	Precalculus II: Trigonometry	4
<u>Writing II:</u>		4
Elective		3
Credits		15

Spring

GEOG 265	Geographic Information Systems	4
GEOG 278 or GEOG 279 or G 202	Physical Geography: Landforms in Nature or Physical Geography: From Severe Weather to Climate Change or Geology II - Earth's Surface	4
Elective		3
Elective		4
Credits		15

Second Year

Fall

<u>Biological Science:</u>		4-5
Elective		4
Elective		3
Elective		4
Credits		15-16

Winter

GEOG 211	Cartography	4
<u>Fitness:</u>		3
Elective		3
Elective		3
Elective		3
Credits		16

Spring

GEOG 286	Remote Sensing	4
Elective		3
Elective		3
Elective		3
Credits		13

Total Credits 90-91