

# 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
<b>Baccalaureate Core</b>		
<b>Skills</b>		
<u>Fitness:</u>		3
Mathematics: Met by Program Requirements		
<u>Writing I:</u>		4
<u>Writing II:</u>		4
<b>Perspectives Courses</b>		
<u>Biological Science:</u>		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	
<b>Program Requirements</b>		
GEOG 101	Introduction to Geospatial Science & GIS	4
GEOG 211	Cartography	4
GEOG 265	Geographic Information Systems	4
GEOG 286	Remote Sensing	4
MTH 111	College Algebra	4
MTH 112	Trigonometry	4
<b>Electives</b>		<b>39</b>
Choose any course numbered 100 or above that brings the total credits to 90 quarter hours.		
<b>Total Credits</b>		<b>90-91</b>

## 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.

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 111	College Algebra	4
<u>Writing I:</u>		4
<b>Credits</b>		<b>16</b>

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

Spring		Credits
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
<b>Credits</b>		<b>15</b>

## Second Year

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

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

Spring		Credits
GEOG 286	Remote Sensing	4
Elective		3
Elective		3
Elective		3
<b>Credits</b>		<b>13</b>

<b>Total Credits</b>	<b>90-91</b>
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