

# Occupational Endorsement Certificate in Geographic Information Systems

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The Occupational Endorsement Certificate (OEC) in Geographic Information Systems prepares students for understanding the fundamentals of geospatial science and mastering practical skills required in the field of geospatial industry.

The OEC in Geographic Information Systems is recommended for students who come in at a mathematics placement level equal to or exceeding MATH A152 Trigonometry. Students who do not meet this level will have to take additional courses to meet the prerequisites for this OEC. This may require additional semesters to completion.

## Admission Requirements

- Complete the Admission Requirements for Occupational Endorsement Certificates (<http://catalog.uaa.alaska.edu/academicpoliciesprocesses/admissions/undergraduate/>).

## Graduation Requirements

- Complete the General University Requirements for Occupational Endorsement Certificates (<http://catalog.uaa.alaska.edu/undergraduateprograms/oecrequirements/>).
- Complete the following major requirements with a minimum grade of C:

Code	Title	Credits
CSCE A101	Introduction to Computer Science	3
GIS A101	Introduction to Geographic Information Systems	3
GIS A201	Intermediate Geographic Information Systems	3
GIS A351	Remote Sensing	3
GIS A458	Spatial Data Management	3
GIS A467	Image Analysis	3
<b>Total</b>		<b>18</b>

**A minimum of 18 credits is required for the degree.**

## Program Student Learning Outcomes

Students graduating with an Occupational Endorsement Certificate in Geographic Information Systems will be able to:

- Effectively manage databases and visualize results of geospatial analysis
- Apply programming skills in order to advance analysis with GIS
- Address planning, decision-making, and operational needs with geospatial skills