



Geographic Information Systems Applications Certificate 2016 – 2018

This certificate is designed for students majoring or working in related fields who wish to enhance their employment prospects or future graduate work with skills in geographic information systems (GIS). Such skills are in demand in economics, education, geosciences, government, planning, landscape architecture, public health, public safety, recreation, humanities, graphic design and marine, earth and life sciences.

Coursework stresses hands-on service learning along with relevant theory, giving students practical experience in addressing real world problems and questions.

At least one-third of all credits used toward the GIS certificates must be taken at UMM.

Certificate in GIS Applications

| Certificate Requirements | 15-16 cr |
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| • GIS 230 GIS Applications I | 4 |
| • GIS 330 GIS Applications II | 4 |
| • GIS 204 Global Positioning Systems (GPS) | 1-2 |
| <i>Select additional six or more credits of GIS elective courses at the 300-level or higher</i> | 6 |