

GIST

Geographic Information
Science and Technology

GEOGRAPHIC INFORMATION SCIENCE & TECHNOLOGY Associate of Applied Science and Certificate in GIST

The Geographic Information Science and Technology (GIST) program provides students with education in mapping and spatial database technology including GIS, GPS, remote sensing, and spatial analysis techniques. Instruction emphasizes application to a variety of fields through hands-on learning with state-of-the-art hardware, software, and other mapping tools. Graduates may seek employment as GIS Technicians, GIS Specialists, or GIS Analysts with government and private industry that rely on geospatial information for managing resources, planning, transportation, emergency response, and other location-based services.

Degree options include a one-year certificate and a two-year Associate of Applied Science (AAS). The certificate is appropriate for persons interested in developing skills in geospatial technologies to use in their current profession or for those seeking immediate employment as a technician. The AAS is designed to provide a broader and deeper education in GIST and is appropriate for students seeking employment as technicians and analysts.

Soon a third program, an Associate of Science (AS), will be offered for students transferring to a four-year college.

CERTIFICATE REQUIREMENTS

1st Semester

GIST 111	Introduction to Mapping Technologies	4 credits
GIST 115	Map Use, Interpretation & Design	4 credits
SPCH 110	Public Speaking -OR-	
SPCH 111	Interpersonal Communication	3 credits
COSC 125	Business Microcomputer Applications	3 credits
MATH 185	College Algebra	3 credits

		Total 17 credits

2nd Semester

GIST 120	Global Positioning Systems (GPS) & Surveying Methods	4 credits
GIST 151	Geographic Information Systems I	4 credits
COSC 185	Database Management Systems (Access)	3 credits
GEOG 155	Introduction to Physical Geography	4 credits

		Total 15 credits

Total for Certificate: 32 credits

ASSOCIATE OF APPLIED SCIENCE REQUIREMENTS – SEE NEXT PAGE →

GIST Program Information

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GEOGRAPHIC INFORMATION SCIENCE & TECHNOLOGY

Associate of Applied Science AND Certificate in GIST.

ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS

1st Semester

GIST 111	Introduction to Mapping Technologies	4 credits
GIST 115	Map Use, Interpretation & Design	4 credits
GEOG 145	Human Geography	3 credits
ENGL 111	Freshman Composition -OR-	
ENGL 118	Technical Composition	3 credits
COSC 125	Business Microcomputer Applications	3 credits

Total 17 credits

2nd Semester

GIST 151	Geographic Information Systems I	4 credits
GIST 120	Global Positioning Systems (GPS) & Surveying Methods	4 credits
GEOG 155	Introduction to Physical Geography	4 credits
MATH 185	College Algebra	3 credits

Total 18 or 19 credits

Electives — Pick one from the following choices

BIOL 230	Environmental Conservation -OR-	4 credits
GEOL 110	Introduction to Geology -OR-	4 credits
RENG 270	Sustainable Development -OR-	3 credits
SOCI 110	Introduction to Sociology -OR-	3 credits
COCG 160	Computer Graphics I -OR-	4 credits
COSC 190	Database Concepts and Design -OR-	3 credits
DRFT 150	Computer Aided Drafting (CAD)	4 credits

Total 18 or 19 credits

3rd Semester

GIST 201	Geographic Information Systems II	4 credits
GIST 230	Geographic Image Analysis	4 credits
COSC 214	Visual Basic I -OR-	
COSC 118	Computer Programming Fundamentals with C++	3 credits
SPCH 110	Public Speaking -OR-	
SPCH 111	Interpersonal Communication	3 credits
COSC 185	Database Management Systems (Access)	3 credits

Total 17 credits

4th Semester

GIST 250	Advanced Database Concepts	3 credits
GIST 270	Advanced Geographic Information Systems	4 credits
ENGL 218	Advanced Technical Writing	3 credits
MATH 251	Statistics	4 credits

Total 14 credits

Total for AAS Degree

67 or 68 credits

Optional Courses

GIST 295	*GIS Topics	1–6 credits
GIST 299	*GIS Special Problems	1–6 credits
GIST 285	*Internship	3 credits

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