

**GEOGRAPHIC INFORMATION SCIENCE TECHNOLOGY  
ASSOCIATE OF APPLIED SCIENCE  
Catalog 2005-2007**

The Geographic Information Science 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 more comprehensive education in GIST and is appropriate for students seeking employment as technicians and analysts.

			<b>Credit Hours</b>
<b>1st Semester</b>			
GIST	111	Introduction to Mapping Technologies	4
GIST	115	Map Use, Interpretation and Design	4
GEOG	145	Human Geography	3
ENGL	111	Freshman Composition <b>OR</b>	
ENG	118	Technical Composition	3
COSC	125	Business Microcomputer Applications	3
			Total 17 credits
<b>2nd Semester</b>			
GIST	151	Geographic Information Systems I	4
GIST	120	GPS and Surveying Methods	4
GEOG	155	Introduction to Physical Geography	4
MATH	185	College Algebra	3
<b>Electives – pick one from the following choices</b>			
BIOL	230	Environmental Conservation <b>OR</b>	4
GEOL	110	Introduction to Geology <b>OR</b>	4
RENG	270	Sustainable Development <b>OR</b>	3
SOCI	110	Introduction to Sociology <b>OR</b>	3
COGR	160	Computer Graphics I <b>OR</b>	4
COSC	190	Database Concepts and Design <b>OR</b>	3
DRFT	150	Computer Aided Drafting (CAD)	4
			Total 18 or 19 credits
<b>3rd Semester</b>			
GIST	201	Geographic Information Systems II	4
GIST	230	Geographic Image Analysis	4
COSC	214	Visual Basic I <b>OR</b>	
COSC	118	Computer Programming Fundamentals I with C++	3
SPCH	110	Public Speaking <b>OR</b>	
SPCH	111	Interpersonal Communication	3
COSC	185	Database Management Systems (Access)	3
			Total 17 credits
<b>4th Semester</b>			
GIST	250	Advanced Database Concepts	3
GIST	270	Advanced Geographic Information Systems	4
ENGL	218	Advanced Technical Writing	3
MATH	251	Statistics	4
			Total 14 credits

**Total credit hours required for this degree is 67 or 68**

**Optional Courses**

GIST	295	*GIS Topics	1-6 credits
GIST	299	*GIS Special Problems	1-6 credits
GIST	285	*Internship	3 credits
GIST	280	*Cooperative Education	3 credits