

**BLUEGRASS COMMUNITY AND TECHNICAL COLLEGE**

**Geographic Information Systems  
Technology Certificate**

Academic Plan Code – 4507023019

ACH 185	Computer Aided Drafting I <b>AND</b>	3
ACH 285	Computer Aided Drafting II <b>OR</b>	3
ACH 298	Computer 3-D Modeling	(3)
CE 211	Introduction to Surveying <b>AND</b>	3
CET 220	Intermediate Surveying	4

A Geographic Information System (GIS) is a powerful combination of mapping technology and databases, that, when combined, may create an array of spatially arranged data on a map surface for detailed analysis. Once the domain of a few specialized government agencies and the military, GIS is now utilized by virtually every branch of the government and has become commonplace throughout the private sector. GIS may be employed for a stunning variety of applications: environmental, marketing, demographic and urban planning are just a few of the fields in which GIS is currently utilized. The curriculum is tailored to those enrolled in the following technical degree programs: Architectural Technology, Civil Engineering, Computer and Information Technologies and Environmental Science Technology. The acquisition of an associate in applied science degree coupled with a Certificate in GIS Technology will make a graduate more marketable in his/her respective field. Those pursuing a B.A. or B.S. degree in geography will also find the curriculum tailored to their respective degree program. The GIS Technology Certificate requires the completion of 24 hours of coursework.

Course	Title	Credits
	General Education Courses	6
CIT 105	Introduction to Computing	3
GIS 110	Spatial Data Analysis and Map Interpretation	3
GIS 120	Introduction to Geographic Information Systems	3
GIS 210	Advanced Geographic Information Systems	3
	One set of related field course pairings selected from the list below:	6
	<b>Total Credit Hours</b>	<b>24</b>
GEO 130	Earth's Physical Environment <b>AND/OR</b>	3
GEO 210	Pollution, Natural Hazards and Environmental Management <b>AND/OR</b>	(3)
GEO 285	Introduction to Planning	(3)
ENV 101	Fundamentals of Hydrological Geology <b>AND</b>	3
ENV 203	Fundamentals of Solid Waste	3
CIS/CIT 148	Visual Basic I <b>AND</b>	3
CIS/CIT 248	Visual Basic II	3
CAD 100	Introduction to Computer-Aided Design <b>AND</b>	3
CAD 200	Intermediate Computer-Aided Design	3

(Courses are listed by category and not necessarily in the order to be taken)