LANSING COMMUNITY COLLEGE

CURRICULUM GUIDE

Geographic Information Systems and Geospatial Technology
Associate in Applied Science Degree

Curriculum Code: 0224 (Effective Fall 2011 - Summer 2016)

Geographic Information Systems and Geospatial Technology combines computer technology, mapping technologies, aerial photography, and satellite imagery with the most current environmental resource management and environmental analysis software. Geographic Information Systems (GIS) technicians work with computer drafting, design, database management, graphic design, and computer analysis. Environmental technology requirements include a working knowledge of natural systems and related regulations and their assessment, planning, restoration, and management. GIS technicians are employed with engineering and design firms, state and federal agencies, environmental firms, parks and recreation departments, and with municipalities and local government units. **Not all courses in this program transfer to all colleges.** Students planning to transfer should see an academic advisor before enrolling in any course.

PREREQUISITES

Students should see *Course Descriptions* or *Course Offerings* for course prerequisite information. See the *Assessment and Placement Testing* section for skills assessment and advising information.

INFORMATION

Contact the Design & Construction Technologies Program, West Campus Building, Room M103, telephone number (517) 483-5338 (Website: www.lcc.edu/design/geographic/) or Student Services West Campus, West Campus Building, Room M106, telephone number (517) 267-5452.

REQUIREMENTS — TOTAL: 47 CREDITS

CODE	TITLE	CREDIT HOURS
CITA 133	Microsoft Access Database	3
CITP 110	Intro to Computer Programming	4
CITP 150	Intro to VB.Net Programming	4
GRET 205	Principles of GIS	3
GRET 210	Global Positioning Systems	3
GRET 223	Environmental Resource Mgmt	3
GRET 240	Cartography in GIS	3
GRET 241	Remote Sens/AirPhoto Interpret	3
GRET 255	Beginning ARC/GIS	3
GRET 256	Advanced ARC/GIS	3
GRET 266	Project Design in GIS	3
GRET 270	ArcIMS	3
GRET 271	Parcel Mapping	3
GRET 272	GEODatabases	3
GRET 275	GIS Proj Mgmt & Implementation	3

LIMITED CHOICE REQUIREMENTS **TOTAL: 24-30 CREDITS**

Complete the indicated number of credits from **EACH CHOICE** listed below.

CHOICE 1: General Education Core Areas **15-21 Credits**

(See *General Education Core Requirements* for information on how to fulfill these requirements. Core area proficiency exams, where appropriate, are available for each core area.)

	Communication Core Area	3-4
	Global Perspectives and Diversity Core Area	3-4
	Mathematics Core Area	3-4
	Science Core Area	3-5
	Writing Core Area	3-4

CHOICE 2: Additional Related Courses **9 Credits**

CITP 190	Intro to Programming in JAVA	3
GRET 203	Beginning MicroStation	3
GRET 220	Hydrological Systems	3
GRET 221	Landforms/Soil Systems in GIS	3
GRET 273	GIS in Government	3

MINIMUM TOTAL **71**

SUGGESTED COURSE SEQUENCE

Students should see course descriptions to find out when departments plan to offer courses. Students who for any reason are unable to follow the course sequence suggested below (for example, those who are part-time, have transferred in courses from another school, or have prerequisites to fulfill) should contact an academic advisor for help with adjustments.

I	II	III	IV
CITA 133	CITP150	GRET 210	GRET 266
CITP 110	GRET 223	GRET 270	GRET 275
GRET 205	GRET 241	GRET 271	Lim.Ch.1
GRET 240	GRET 256	GRET 272	Lim.Ch.1
GRET 255	Lim.Ch.1	Lim.Ch.1	Lim.Ch.2
Lim.Ch.1		Lim.Ch.2	Lim.Ch.2