



START DATE(S): August, <del>January</del> (Suspended)	EFFECTIVE: <b>AUGUST 2006</b>
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**GEOGRAPHIC INFORMATION SYSTEMS TECHNICIAN**

*Associate Degree*

Course Number	Course Title	Hrs./Week	Credits	Prerequisite(s)/Comments
<b>First Semester</b>				
107-123	<a href="#">Computer Concepts</a> (T, L)	4	3	
178-100	<a href="#">Introduction to GIS</a> * (T)	2	2	<a href="#">Algebra proficiency expected</a>
178-110	<a href="#">Geography for GIS</a> * (T)	1	1	<a href="#">Algebra proficiency expected</a>
606-161	CAD, Basic (L)	6	3	
801-195	<a href="#">Written Communications</a> (T)	3	3	
804-115	<a href="#">College Technical Math I</a> (T) <b>OR</b> (See Math Tips on reverse side)	5	5	<a href="#">Algebra proficiency expected</a>
<b>Total Semester Hrs./Week and Total Credits</b>			<b>17 cr.</b>	
<b>Second Semester</b>				
006-155	Land Use Planning and Resource Mgmt. (T) <b>OR</b>	3	3	"See Tips Sheet"
152-101	Programming Fundamentals with VB.NET (T, L)	4		
103-173	Intro to Access (L)	2	1	<a href="#">Self-paced lab</a>
178-141	<a href="#">Computer Graphics for GIS/AutoCAD</a> * (L)	6	3	606-161 or 607-164
178-151	<a href="#">Land Records</a> * (T)	2	2	
801-197	<a href="#">Technical Reporting</a> (T) <b>OR</b>	3	3	801-195
804-189	<a href="#">Introductory Statistics</a> (T)			804-113 or 804-115
809-122	<a href="#">Introduction to American Government</a> (T) <b>OR</b>	3	3	
809-197	<a href="#">Contemporary American Society</a> (T)			
<b>Total Semester Hrs./Week and Total Credits</b>			<b>15 cr.</b>	
<b>Third Semester</b>				
178-112	<a href="#">Coordinate Geometry</a> (COGO)* (L)	6	3	178-141
178-114	<a href="#">Digital Cartography</a> * (T, L)	4	3	178-141
178-121	<a href="#">Digital GIS Concepts</a> * (T, L)	5	3	178-100
178-123	<a href="#">GIS Data Analysis</a> * (L)	4	2	178-141 or consent of instructor
178-130	<a href="#">Fundamentals of Surveying for GIS</a> (T, L) [8 weeks]	6	2	Fall only, <i>traditional classroom format</i> , 606-161, 804-114 or 804-115
178-143	<a href="#">Global Positioning Systems</a> (T)	1	1	<a href="#">Algebra proficiency expected</a>
809-195	<a href="#">Economics</a> (T)	3	3	
<b>Total Semester Hrs./Week and Total Credits</b>			<b>25</b>	<b>17 cr.</b>
<b>Fourth Semester</b>				
178-122	<a href="#">Advanced GIS Applications</a> * (T, L)	5	3	178-123
178-140	<a href="#">Photogrammetry and Remote Sensing</a> * (T)	3	3	804-114 or 804-115
178-160	GIS Practicum (total 144 hours)	9	2	178-123
801-175	<a href="#">Job Search Communications</a> (T) (1st 8 weeks)	2	1	801-195
809-198	<a href="#">Introduction to Psychology</a> (T) <b>OR</b>	3	3	
809-199	<a href="#">Psychology of Human Relations</a> (T)			
801-196	<a href="#">Oral/Interpersonal Communications</a> (T) <b>OR</b>	3	3	
801-198	<a href="#">Speech</a> (T)			
	Elective	--	3	
<b>Total Semester Hrs./Week and Total Credits</b>			<b>18 cr.</b>	
<b>Suggested Electives</b>				
103-102	<a href="#">Microsoft Office Suite</a> (T, L)	3	2	
150-101	<a href="#">PC, Networking and Security Basics</a> (T, L)	3	2	
152-103	.NET Programming I (T, L)	4	3	152-101
152-107	<a href="#">Web Programming I</a>	4	3	
809-166	Introduction to Ethics: Theory and Applications (T)	3	3	

TOTAL CREDITS REQUIRED =67

2.0 MINIMUM PROGRAM CUMULATIVE GPA REQUIRED FOR GRADUATION

**\*Open lab individualized instruction**

Students who interrupt their education and then reenter the same program are required to meet current program requirements.

10-178-1

DeptChair/PgmDir: RMEHELKE

PgmDean/CampusAdm: DGAVIN

Counselor: JPHILEN

PgmAssist: JGOLDSMITH

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04/13/05, revised 04/20/05, 10/06/05, 12/28/06

# Geographic Information Systems Tips

## Computer Skills

To be successful in this program, proficiency with the use of the computer will be necessary. If you are not computer literate, the Study Skills Center offers Basic Computer Literacy training free at many locations throughout the district. In addition, you should be familiar with Microsoft Office Suite (if not, take 103-102 Microsoft Office Suite in the first semester, which can be counted as an elective).

## Math Proficiency

Successful completion of high school algebra or its equivalent is essential for success in this program. A COMPASS score of 45 or better on pre-algebra may indicate proficiency. 854-771 Basic Algebra meets this requirement and can be taken at CVTC.

## Math Option

**Break the 5 credit College Technical Math 1 (804-115) course into the following two courses:**

804-113 College Technical Math 1A – 3 credits, 16 weeks

804-114 College Technical Math 1B – 2 credits, 16 weeks

You must complete both of these courses to receive the credit equal to 804-115 College Technical Mathematics 1

## Program Course Delivery Type

All 178-numbered courses (except 178-130) are 16-week self-paced courses that can be completed in 16 weeks or less. All other courses are 16-week courses. 178-123 and 178-141 require a C- or better to meet the prerequisite requirement. Regular attendance is required for self-paced and traditional courses.

## Distance Learning

Some courses are now available via distance learning. See your instructor for more details.

## Transfer Credit

To see what courses transfer to a public postsecondary institution in Wisconsin, go to the Transfer Information System at [www.uwsa.edu/tis](http://www.uwsa.edu/tis).

- Click on Credit Transfer Wizard
- Click on Course Wizard

You must contact the college you wish to attend to find out exactly what they expect and when you should seek admission. The Transfer Information System does not include private colleges or out-of-state institutions.

## Recommended Electives

**103-102 Microsoft Office Suite** (2 credits, 3 hours/week), No prerequisite

The Microsoft Office Suite software packages Word, Excel, Access, and PowerPoint are studied. Additionally, Windows, the Internet and computer concepts are introduced.

**150-101 PC, Networking and Security Basics** (2 credits, 1 theory, 2 lab), no prerequisite

This course will introduce the learner to basic PC operational concepts, operating system installation procedures, small office/home office (SOHO) PC networking concepts, local and network printing procedures, data protection and PC security focused on the curtailment of adware, spyware and virus issues. This course is web enhanced through our Blackboard course management system and will require the learner to have access to an Internet connected PC for coursework and research between classroom sessions.

**152-103 .NET Programming I** (3 credits, 2 theory, 2 lab), Prerequisite: 152-101

This course builds on the foundation of Programming Fundamentals with VB.NET. In this course you will explore database usage using ADO.NET, create Crystal Reports in a project, develop objects and classes, and incorporate other techniques not covered in the Programming Fundamentals with VB.NET course. This course will require you to create an application that will be presented at the end of the semester.

**152-107 Web Programming I** (3 credits, 2 theory, 2 lab), no prerequisites

Create dynamic Web pages using XHTML and Cascading Style Sheets (CSS). Basic knowledge of the Internet recommended. An online offering of this course is available.

**809-166 Introduction to Ethics: Theory and Applications** (3 credits, 3 theory), no prerequisite

This course provides a basic understanding of the theoretical foundations of ethical thought. Diverse ethical perspectives will be used to analyze and compare relevant issues. Students will critically evaluate individual, social, and/or professional standards of behavior and apply a systematic decision-making process to these situations.

## It's Your Choice – How Much Programming Do You Want?

Less exposure to programming	More exposure to programming
<b>Take:</b> 006-155 Land Use Planning & Resource Mgmt. (3 cr.) 150-101 PC, Networking and Security Basics (2 cr.)	<b>Take:</b> 152-101 Programming Fundamentals with VB.NET (3 cr.) 152-103 .NET Programming I (3 cr.) 152-107 Web Programming I (3 cr.)

*See your instructor for advice as you are making this choice.*