

CERTIFICATE (719)

Geographical Information Systems

Purpose: This program is designed to prepare students for entry-level positions in technologies using Geographic Information Systems (GIS) or to expand the knowledge and skills of individuals presently employed in these fields. The use of current ArcGIS® software is emphasized along with exposure to AutoCAD®. This program also provides an excellent foundation for continuation of studies in the GIS Specialization in Architectural/Civil Engineering Technology at Virginia Western.

Occupational Objectives: GIS technician

Admission Requirements: Applicants must meet the general requirements for admission to the college. To be successful in this program, students must have demonstrated Math and English competency to be placed above Algebra I and into English 111. Students not achieving this level will be required to take developmental courses or receive departmental approval.

Program Requirements: To be successful in this program, students must possess basic computer literacy to include keyboard and mouse usage and file management. It is strongly recommended that students take ENG 111 in the first year of coursework.

CURRICULUM AND OTHER REQUIREMENTS

GENERAL EDUCATION CORE COURSES	CREDITS
ENG 111* College Composition I	3
SDV 101 Orientation to Engineering and Engineering Technology	1
E' Mathematics Electives	3

GIS AND RELATED COURSES

DRF 201-202* Computer Aided Drafting and Design I-II	6
EGR 216* Computer Methods in Engineering and Technology	3
GEO 200 Introduction to Physical Geography	3
GIS 200-201* .. Geographical Information Systems I-II	6
GIS 205** GIS 3-Dimensional Analysis	3
GIS 210** Understanding Geographic Data	3
Total Minimum Credits for Certificate	31

¹ Use MTH 115, MTH 120, MTH 163, or MTH 166. See advisor for limitations.

* This course has a prerequisite. Prerequisites for all courses are listed in the course description section at the back of the catalog.

**This course has a co-requisite. Co-requisites for all courses are listed in the course description section at the back of the catalog.

SUGGESTED SCHEDULE

FIRST YEAR	SPRING
FALL	DRF 202
EGR 216	GEO 200
DRF 201	ENG 111
SDV 101	
Mathematics Elective	
 SECOND YEAR	 SPRING
FALL	GIS 201
GIS 200	GIS 205
GIS 210	