PROGRAMS

GEOMATICS TECHNOLOGY (A40420)

Engineering and Technology Pathway: These curriculums are designed to prepare students through the study and application of principles from mathematics, natural sciences, and technology and applied processes based on these subjects.

Course work includes mathematics, natural sciences, engineering sciences and technology. Graduates should qualify to obtain occupations such as technical service providers, materials and technologies testing services, engineering technicians, construction technicians and managers, industrial and technology managers, or research technicians.

Geomatics Technology: A course of study that prepares students to use mathematical and scientific principles for the delineation, determination, planning and positioning of land tracts, boundaries, contours and features applying principles of route surveying, construction surveying, photogrammetry, mapping, global positioning systems, geographical information systems, and other kinds of property description and measurement to create related maps, charts and reports.

Includes instruction in applied geodesy, computer graphics, photointerpretation, plane and geodetic surveying, mensuration, traversing, survey equipment operation and maintenance, instrument calibration, and basic cartography.

Graduates should qualify for jobs as survey party chief, instrument person, surveying technician, highway surveyor, mapper, GPS technician, and CAD operator. Graduates will be prepared to pursue the requirements necessary to become a Registered Land Surveyor in North Carolina.

Associate in Applied Science Degree Program

		Course Hours Per Week		Semester Hours
First Semester (Fall)		Class	Lab	Credit
ACA-115	Success & Study Skills	0	2	1
BPR-130	Print Reading-Construction	3	0	3
CEG-115	Intro to Tech & Sustainability	2	3	3
CEG-115A	Tech & Sustainability Lab	0	3	1
CEG-210	Construction Mtls & Methods	2	3	3
EGR-110 or EGR-150	Intro to Engineering Tech or Intro to Engineering	1	2	2
ENG-111	Writing and Inquiry	3	0	3
***	Technology Elective	1-3	0-2	2-3
	Credit Hours	**12-14**	**13-15**	**18-19**
Second Semester (Spring)				
CEG-111	Intro to Gis and Gnss	2	4	4
CEG-235	Project Management/Estimating	2	3	3

		Course Hours Per Week		Semester Hours
EGR-120	Eng and Design Graphics	2	2	3
ENG-112 or	Writing/Research in the Disc or			
ENG-114	Prof Research & Reporting	3	0	3
MAT***	MAT-121 or MAT-171	2-3	2	3-4
	Credit Hours	**11-12**	**11**	**16-17**
Third Semester (Summer)				
EGR-251	Statics	2	2	3
SRV-110	Surveying I	2	6	4
***	Physics Elective	3	2-3	4
	Credit Hours	**7**	**10-11**	**11**
Fourth Semester (Fall)				
CEG-211	Hydrology & Erosion Control	2	3	3
SRV-111	Surveying II	2	6	4
SRV-220	Surveying Law	2	2	3
***	Humanities/Fine Arts Elective	3	0	3
***	Directed Elective	0-3	2-30	3-4
	Credit Hours	**9-12**	**13-41**	**16-17**
Fifth Semester (Spring)				
CEG-230	Subdivision Planning & Design	1	6	3
SRV-210	Surveying III	2	6	4
SRV-240	Topo/Site Surveying	2	6	4
***	Social/Beh Sciences Elective	3	0	3
	Credit Hours	**8**	**18**	**14**
Total Required Minimum Semester Hours Credit				75

Technology Electives:		Class	Lab	Credit
CIS-111	Basic PC Literacy	1	2	2
EGR-125	Appl Software for Tech	1	2	2
UAS-110	Intro to UAS Operations	3	0	3
UAS-115	Small UAS Certification	2	0	2
Physics Electives:				
PHY-131	Physics-Mechanics	3	2	4
PHY-151	College Physics I	3	2	4
PHY-251	General Physics I	3	3	4
Directed Electives:				
CIV-111	Soils and Foundations	2	4	4
MAT-172	Precalculus Trigonometry	3	2	4
MAT-263	Brief Calculus	3	2	4
MAT-271	Calculus I	3	2	4

		Course Hours Per Week		Semester Hours
MAT-272	Calculus II	3	2	4
WBL-111G	Work-Based Learning I	0	10	1
WBL-112G	Work-Based Learning I	0	20	2
WBL-113G	Work-Based Learning I	0	30	3
WBL-121G	Work-Based Learning II	0	10	1
WBL-122G	Work-Based Learning II	0	20	2

View Catalog Archives

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