My DEGREE MAP COLLEGE OF ARTS AND SCIENCES APPROVED ACADEMIC PLAN SURVEYING AND GEOMATICS SCIENCES PROGRAM PROGRAM YEAR 2024-25

		PROGRAM YEAR 2024-25 1ST YEAR			
FALL SEMESTER	HRS	SPRING SEMESTER	HRS	SUMMER SEMESTER	HRS
TROY 1101	1	FREE ELECTIVE	3		
ENG 1101/03	3	AREA II FINE ARTS COURSE	3		
MTH 1125 (MTH 1114)	4	STAT 2210 (MTH 1105)	3		
IS 2241	3	ENG 1102/04 (ENG 1101/03)	3		
ART 2201	3	AREA IV HIS COURSE	3		
TOTAL	14	TOTAL	15		
		2ND YEAR			
FALL SEMESTER	HRS	SPRING SEMESTER	HRS	SUMMER SEMESTER	HRS
GEM 2220/L220 (MTH 1114)	3/1	GEM 3330/L330 (GEM 2220)	3/1	GEM 3395 DR (IF GEM 4499 WILL NOT BE TAKEN 4TH YEAR) (GEM 2220)	1
AREA IV SS COURSE	3	GIS 2201 (MTH 1114)	3		
AREA IV SS COURSE (GEO 2210 DR)	3	AREA II HUM/FA COURSE (COM 2241 DR)	3		
GEM 1100	2	GEM 1101 (GEM 1100)	2		
PHY2252/L252 (MTH 1114)	3/1	PHY 2253/L253 (PHY 2252)	3/1		
TOTAL	16	TOTAL	16	TOTAL	1
		3RD YEAR			
FALL SEMESTER	HRS	SPRING SEMESTER	HRS	SUMMER SEMESTER	HRS
GIS 3390	3	GIS 3391 (GIS 3390)	3	GEM 4496 DR (IF GEM 4499 WILL NOT BE TAKEN 4 ^{TE} YEAR) (GEM 3395)	1
GEM 3309/L309 (GEM 2220)	3/1	GEM 4408 (MTH 1125)	3		
AREA II LIT COURSE (ENG 1102)	3	GEM 3310/L310 (GEM 3309)	3/1		
GEM 3366	3	MTH 2230 (MTH 1125)	3		
FREE ELECTIVE	3				
TOTAL	16	TOTAL	13	TOTAL	1
		4TH YEAR		· · · · · · · · · · · · · · · · · · ·	
FALL SEMESTER	HRS	SPRING SEMESTER	HRS	SUMMER SEMESTER	HRS
GEM 4409/L409	3/1	GEM 4407/L407 (GEM 4409)	3/1	SELECT COURSES THAT HAVE NOT BE	E NOT BEEN
GEM 3379 (MTH 1125, STAT 2210, MTH 2230, GIS 2201, GEM 3330)	3	GEM 4499 (IF CO-OPS TOTALING 2 CREDIT HOURS NOT TAKEN) (GEM 4409)	2	COMPLETED	
GEM 4410 (GIS 3390, GEM 4408)	3	GEM 4490 (GEM 4409)	1		
FREE ELECTIVE	3	AREA IV SS COURSE	3		
FREE ELECTIVE	3	GEM 4405/L405 (GEM 3330)	3/1		
TOTAL	16	TOTAL	14	-	
SUBMIT YOUR GRADUATION APPLICATI DR - Department Recommended	ON	MINIMUM HOUR	S REQUIRE	ED FOR DEGREE	120

CURRICULUM (120 hours) SPECIALIZED GENERAL STUDIES REQUIREMENTS (55 HOURS) SPECIALIZED GENERAL STUDIES REQUIREMENTS (55 HOURS) Area // (6 hours) PROGRAM REQUIREMENTS (53 HOURS) Area // (12 hours) GEM 1100 (2) Computer-Aided Drafting 11 GEM 2220 (3) Basics of Surveying GEM 1101 (2) Computer-Aided Drafting 11 GEM 2220 (3) Basics of Surveying (3 GEM 1300 (3) Land Survey Principles GEM 3300 (3) Land Survey Principles GEM 3300 (3) Land Survey Practice GEM 3300 (3) Land Survey Practice GEM 3300 (3) Advance Measurement Analysis GEM 3301 (1) Land Survey Practice GEM 3301 (1) Land Survey Practice GEM 3300 (3) Advance Measurement Analysis GEM 3400 (1) Advance Measurement Analysis GEM 4400 (3) Advance Measurement Analysis GEM 4400 (3) Advance Measurement Analysis GEM 4400 (3) Advance Measurement Analysis GEM 4400 (1) Land	SURVEYING AND GEOMATICS SCIENCES PROGRAM						
SPECIALIZED GENERAL STUDIES REQUIREMENTS (55 HOURS) PROGRAM REQUIREMENTS (53 HOURS) Area // (6 hours) (56 HOURS) GEM 1101 (3) Composition I** ENG 1101 (3) Composition I** GEM 1100 (2) Computer-Aided Drafting 11 GEM 1101 (2) Computer-Aided Drafting 11 GEM 1300 (3) Land Survey Principles GEM 1300 (3) Land Survey Principles GEM 1300 (3) Land Survey Principles GEM 1301 (3) Land Survey Practice GEM 1403 (3) Hydroare Measurement Analysis GEM 1408 (3) Hydroare Measurement Analysis GEM 1408 (3) Hydroare Measurement Analysis GEM 1405 (1) Route & Construction GEM 1405 (1) Route & Construction GEM 1405 (1) Route & Construction GEM 1406 (1) Runde & Construction GEM 1406 (1) Runde & Construction GEM 1406 (1) Runde & Construction GEM 1406 (3) Hydroaregy GEM 1403 (3) Hydroa	CURRICULUM						
(55 HOURS) Rice J (E hours) ENG 1101 (3) Composition 1** ENG 1102 (3) Composition 1** Arce J (H 12 hours) 1000-2000 level courses within Literature (3 hours) Select Any 1000-2000 level courses with an expanded historical and cultural scope in the Humanites/Fine Arts areas (6 hours) Select Any 1000-2000 level courses with an expanded historical and cultural scope in the Humanites/Fine Arts areas (6 hours) Philosophy, Classics, Theatre, Music, Dance, Communication, Sign Language, Interdisciphinary Studies, Deneral Physics 1 Philosophy, Classics, Theatre, Music, Dance, Select one Sequence for 6 hours Select one Sequence for 6 hours PHY 2252 (3) General Physics 1 Lab PHY 2253 (1) General Physics 1 Lab <t< th=""><th colspan="6"></th></t<>							
Area II (2 hours) GEM 1100 (2) Computer-Aided Drafting 11 ENG 1101 (2) Computer-Aided Drafting 11 ENG 1101 (2) Computer-Aided Drafting 11 ENG 1101 (2) Computer-Aided Drafting 11 GEM 1100 (2) Computer-Aided Drafting 11 GEM 1101 (2) Computer-Aided Drafting 11 GEM 220 (1) Basics of Surveying Lab GEM 1300 (2) Land Survey Practice Lab GEM 1300 (3) Land Survey Practice Lab GEM 1300 (1) Land Survey Practice Lab GEM 1300 (3) Land Survey Practice Lab GEM 1300 (1) Advance Measurement Analysis Select Any 1000-2000 level courses with an expanded GEM 1300 (1) Advance Measurement Analysis GEM 4408 (3) Geodesy & Geoderics GEM 4408 (3) Geodesy & Geoderics GEM 4408 (3) Geodesy & Geoderics GEM 4408 (3) Route & Construction GEM 4408 (3) Route & Construction GEM 4405 (3) Route & Construction GEM 4405 (3) Route & Construction GEM 4407 (3) Land Development Lab GEM 4409 (3) Hydrology GEM 4409 (3) Hydrology GEM 4409 (3) Hydrology Lab GEM 4409 (3) Hydrology GEM 4409 (4) Geomatics Capstone OR GEM 4409 (1) Geomatics Capstone		PROGRAM REQUIREMENTS (53 HOURS)					
ENG 1101 (3) Composition I** GEM 1101 (2) Computer-Aided Drafting 11 ENG 1102 (3) Composition II ** GEM 220 (3) Basics of Surveying Arca II (12 hours) GEM 1220 (1) Basics of Survey Principles 1000-2000 level course within Literature (3 hours) GEM 1309 (3) Land Survey Principles Select Any 1000-2000 level courses with an expanded historical and cultural scope in the Humanities/Fine Arts areas (6 hours) GEM 1300 (1) Land Survey Practice Lab GEM 1300 (3) Land Survey Practice GEM 3300 (3) Advance Measurement Analysis Lab GEM 1408 (3) Coedesy & Geodetics GEM 3300 (3) Fundamental to Geographical Information and Analysis GEM 1408 (3) Coedesy & Geodetics GEM 3408 (3) Coedesy & Geodetics GEM 4408 (3) Coedesy & Geodetics GEM 3408 (3) Coedesy & Geodetics GEM 112 (2) Calculus I** General Physics I Select one Sequence for 8 hours GEM 4407 (3) Land Development PHY 2253 (1) General Physics I Lab GEM 4407 (1) Land Development PHY 2252 (2) Physics I with Calculus GEM 4409 (1) Geomatics Capstone PHY 2253 (1) General Physics I Lab GEM 4409 (1) Geomatics Capstone PHY 2253 (1) General Physics I Lab GEM 4499 (2) Geomatics / GIS Projects OR GEM 4499 (2) Geomatics / GIS Projects OR GEM 4499 (2) Geomatics / GIS Projects </th <td></td> <td>GEM 1100 (2) Computer-Aided Drafting 1</td>		GEM 1100 (2) Computer-Aided Drafting 1					
ENG 1102 (3) Composition II ** GEM 2220 (3) Basics of Surveying Lab Area IV (12 hours) GEM 220 (1) Basics of Surveying Lab 1000-2000 level course within Literature (3 hours) GEM 220 (1) Basics of Surveying Lab ART 2201 (3) Introductory Drawing (3 hours) GEM 1202 (1) Basics of Surveying Lab Select Any 1000-2000 level courses with an expanded GEM 1300 (1) Land Survey Practice Lab Select Any 1000-2000 level courses with an expanded GEM 1300 (1) Advance Measurement Analysis Area IV (12 hours) Theater, Music, Dance, GEM 4408 (3) Geodesy & Geodetics Ormunication, Sign Language, Interdisciplinary Studies, or other Humanities/Fine Arts areas (6 hours) GEM 4403 (3) Fundamentals of Geographical Information Sciences Area IV (12 hours) General Physics I GEM 4405 (3) Route & Construction Lab PHY 2252 (3) General Physics I GEM 4407 (3) Land Development Lab GEM 4409 (3) Hydrology PHY 2253 (1) General Physics I Lab GEM 4409 (3) Hydrology GEM 4409 (3) Geomatics Capstone OR GEM 4409 (3) Hydrology GEM 4409 (3) Geomatics Capstone PHY 2252 (3) Physics I with Calculus GEM 4409 (3) Geomatics Capstone GEM 4409 (3) Geomatics Capstone OR GEM 4409 (3) Hydrology GEM 4409 (3) Geomatics Capstone GEM 4409 (3) Geomatics Capstone OR							
Area // (12 hours)GEM L220 (1) Basics of Survey Principles1000-2000 level course within Literature (3 hours)GEM 3309 (3) Land Survey Principles LabART 2201 (3) Introductory Drawing (3 hours)GEM 3310 (3) Land Survey PrinciplesSelect Any 1000-2000 level courses with an expandedGEM 3310 (3) Land Survey Practicehistorical and cultural scope in the Humanities/Fine ArtsGEM 3309 (3) Advance Measurement AnalysisCommunication, Sign Language, Interdisciplinary Studies, or other Humanities/Fine Arts areas (6 hours)GEM 3390 (3) Advance Measurement AnalysisArea III (12 hours)Gem 3397 (3) Least Squares AdjustmentArea III (12 hours)General Physics IArea III (12 hours)General Physics IHY 2252 (3) General Physics IGEM 4405 (3) Route & Construction LabPHY 2253 (3) General Physics I LabGEM 4407 (3) Land DevelopmentORGEM 4409 (3) HydrologyPHY 2252 (1) General Physics I LabGEM 4409 (1) Geomatics CapstoneORGEM 4409 (1) Geomatics CapstonePHY 2253 (3) Physics I with CalculusGEM 4409 (1) Geomatics CapstoneORGEM 4409 (1) Geomatics CapstonePHY 2253 (1) General Physics I LabGEM 4409 (2) Geomatics / GIS ProjectsORGEM 4409 (2) Coematics / GIS ProjectsPHY 2253 (3) Physics I with CalculusGEM 4409 (2) & 4496 Co-op. Work Exp. I & IIArea IV (12 hours)GEM 4499 (2) Ceomatics / GIS ProjectsAny 1000-2000 level courses from the following ScialiGEM 4499 (2) & eomatics / GIS ProjectsOrdina Science, Apythology, Religion, Social Work, Sociology ot there Scial Science areas (9hrs) in	ENG 1102 (3) Composition II **						
1000-2000 level course within Literature (3 hours) GEM L309 (1) Land Survey Practice ART 2201 (3) Introductory Drawing (3 hours) GEM L303 (1) Land Survey Practice Select Any 1000-2000 level courses with an expanded historical and cultural scope in the Humanities/Fine Arts including English, Foreign Languages, Religion, Philosophy, Classics, Theatre, Music, Dance, Communication, Sign Language, Interdisciplinary Studies, or other Humanities/Fine Arts areas (6 hours) GEM 4303 (3) Advance Measurement Analysis GEM 4308 (3) Geodesy & Geodetics GEM 4408 (3) Geodesy & Geodetics Area III (12 hours) GEM 4405 (3) Route & Construction Geospatial Information and Analysis GIS 3391 (3) Application of Geospatial Information Sciences Area III (12 hours) GEM 4405 (3) Route & Construction Lab GEM 4407 (3) Land Development Lab GEM 4407 (3) Land Development Lab GEM 4407 (3) Land Development Lab GEM 4409 (3) Hydrology Lab GEM 4410 (3) Hydrology Lab GEM 4499 (1) Geomatics Capstone PHY 2262 (3) Physics I with Calculus PHY 1253 (1) General Physics I Lab PHY 2253 (3) Physics I with Calculus PHY 1253 (1) General Physics I Lab PHY 2263 (3) Physics I with Calculus PHY 1253 (1) General Physics I Lab GEM 4490 (1) Geomatics / GIS Projects OR Area IV (12 hours) Any 1000-2000 level courses from the following Social Science disciplines: Anthropology, Business, Criminal Justice, Economics, Finance, Geography, History, Hospitair, Justice, Economics, Finance, Geography, History, Hospitair, Justice, Economics, Finance, Geography, History, Hospitair, Justice, Economics, S,							
ART 2201 (3) Introductory Drawing (3 hours) Select Any 1000-2000 level courses with an expanded historical and cultural scope in the Humanities/Fine Arts disciplines, including English, Foreign Languages, Religion, Philosophy, Classics, Theatre, Music, Dance, Communication, Sign Language, Interdisciplinary Studies, or other Humanities/Fine Arts areas (6 hours) Area III (12 hours) PHY 2252 (3) General Physics I Lab PHY 2253 (1) General Physics I Lab PHY 2253 (3) General Physics I Lab PHY 2253 (1) General Physics I With Calculus PHY 2253 (1) General Physics I With Calculus PHY 2254 (2) & 4496 Co-op. Work Exp. I & II 120 hours are required for graduation. NOTE: Students must complete a six-hour sequence in Literature or History. This sequence must be within the science, Psychology, Religion, Social Science, Psychology, Religion, Social Science, Psychology, Religion, Social Start 2210 (3) Introduction to Statistics TROY 1101 (1) Orientation GIS 2201 (3) Intro to Statistics							
ART 2201 (3) Introductory Drawing (3 hours) GEM L310 (1) Land Survey Practice Lab Select Any 1000-2000 level courses with an expanded GEM L330 (1) Advance Measurement Analysis Mistorical and cultural scope in the Humanities/Fine Arts GEM L330 (1) Advance Measurement Analysis GEM Masses GEM Masses Communication, Sign Languages, Interdisciplinary Studies, or other Humanities/Fine Arts areas (6 hours) GEM 4408 (3) Geodesy & Geodetics Area III (12 hours) GEM Haves (3) Geodesy & Geodetics MTH 1125 (4) Calculus I* GEM 4405 (3) Route & Construction Select one Sequence for 8 hours GEM 4405 (3) Route & Construction Lab PHY 2252 (1) General Physics I PHY 2253 (1) General Physics I OR GEM 4409 (3) Hroto Global Positions OR GEM 4409 (1) Geomatics / GIS Projects PHY 2252 (1) General Physics I Lab OR GEM 4409 (1) Geomatics / GIS Projects OR GEM 4409 (1) Horto 10 Global Positions GEM 4409 (2) Geomatics / GIS Projects OR PHY 2252 (1) General Physics I Lab PHY 2252 (1) General Physics I Lab GEM 4409 (2) Geomatics / GIS Projects OR GEM 4410 (1) Geomatics / GIS Projects O	1000-2000 level course within Literature (3 hours)						
Select Any 1000-2000 level courses with an expanded historical and cultural scope in the Humanities/Fine Arts disciplines, including English, Foreign Languages, Religion, Communication, Sign Language, Interdisciplinary Studies, or driter Humanities/Fine Arts areas (6 hours) Area III (12 hours) Area III (12 hours) Area III (12 hours) MTH 1125 (4) Calculus I** Select one Sequence for 8 hours PHY 2252 (3) General Physics I PHY 2253 (3) General Physics I Lab PHY 2253 (3) General Physics I Lab OR PHY 2262 (3) Physics I with Calculus PHY 2253 (3) Physics II Lab PHY 2253 (1) General Physics I Lab PHY 2253 (2) & 44496 (Co-op. Work Exp. 1 & II 120 hours are required for graduation. NOTE: Students must complete a six-hour sequence in Literature or History. This sequence must be within the same content areas for the selected disciplines: Anthropology, Business, Criminal Science, Brychology, Religion, Social Work, Sociology or other Social Science areas (9thrs) in sequence Area V (13 hours) S 2241 (3) Computer Concepts STAT 2210 (3) Intro to Statistics TROV 1101 (1) Orientation GIS 2201 (3) Intro to Statistics TROV 1101 (1) Orientation GIS 2201 (3) Intro to Statistics TROV 1101 (1) Orientation GIS 2201 (3) Intro to Statistics TROV 1101 (1) Orientation	APT 2201 (2) Introductory Drowing (2 hours)						
Select Any 1000-2000 level courses with an expanded historical and cultural scope in the Humanities/Fine Arts disciplines, including English, Foreign Languages, Religion, Philosophy, Classics, Theatre, Music, Dance, Communication, Sign Language, Interdisciplinary Studies, or other Humanities/Fine Arts areas (6 hours)GEM 1330 (1) Advance Measurement Analysis Lab GEM 3366 (3) Photogrammetry GEM 4408 (3) Geodesy & Geodetics GEM 3379 (3) Least Geographical Information and AnalysisArea III (12 hours)MTH 1125 (4) Calculus I** Select one Sequence for 8 hoursGEM 1405 (1) Route & Construction Lab GEM 4405 (1) Route & Construction Lab GEM 4405 (1) Route & Construction Lab GEM 4406 (3) Route & Construction Lab GEM 4405 (1) Route & Construction Lab GEM 4405 (1) Route & Construction Lab GEM 4406 (3) Inco to Global Positions GEM 4405 (3) Route & Construction Lab GEM 4407 (3) Land Development Lab GEM 4409 (3) Hydrology GEM 4400 (3) Intro to Global Positions GEM 4409 (3) Intro to Statistics TROY 1101 (1) Orientation GEM 4408 (3) Intro to Statistics TROY 1101 (1) OrientationArea IV (12 hours) Any 1000-2000 level courses from the following Social Science, Psychology, Religion, Social Work, Sociology or other Social Science areas (9hrs) in sequence <th< th=""><td>ART 2201 (3) Infloduciory Drawing (3 hours)</td><td></td></th<>	ART 2201 (3) Infloduciory Drawing (3 hours)						
historical and cultural scope in the Humanities/Fine Arts disciplines, including English, Foreign Languages, Religion, Philosophy, Classics, Theatre, Music, Dance, Communication, Sign Language, Interdisciplinary Studies, or other Humanities/Fine Arts areas (6 hours) Area III (12 hours) Area III (12 hours) MTH 1125 (4) Calculus I** Select one Sequence for 8 hours PHY 2252 (3) General Physics I Lab PHY 2253 (3) General Physics I Lab PHY 2253 (3) General Physics I Lab PHY 2253 (3) General Physics I Lab PHY 2252 (3) Physics I with Calculus PHY 2252 (3) Physics I with Calculus PHY 2253 (1) General Physics I Lab OR PHY 2252 (1) General Physics I Lab PHY 2253 (1) General Physics I Lab PHY 2253 (1) General Physics I Lab PHY 2263 (3) Physics I with Calculus PHY 1253 (1) General Physics I Lab PHY 2263 (3) Physics I with Calculus PHY 1253 (1) General Physics I Lab PHY 2263 (3) Physics I with Calculus PHY 1253 (1) General Physics I Lab PHY 2263 (3) Physics I with Calculus PHY 1253 (1) General Physics I Lab PHY 2263 (3) Physics I with Calculus PHY 1253 (1) General Physics I Lab PHY 2263 (3) Physics I with Calculus PHY 1253 (1) General Physics I Lab PHY 2263 (3) Physics I with Calculus PHY 1253 (1) General Physics I Lab PHY 2263 (3) Physics I with Calculus PHY 1253 (1) General Physics I Lab PHY 2263 (3) Physics I with Calculus PHY 1253 (1) General Physics I Lab PHY 2263 (3) Physics I with Calculus PHY 1253 (1) General Physics I Lab PHY 2263 (3) Physics I with Calculus PHY 2263 (3)	Select Any 1000-2000 level courses with an expanded						
disciplines, including English, Foreign Languages, Religion, Philosophy, Classics, Theatre, Music, Dance, Communication, Sign Language, Interdisciplinary Studies, or other Humanities/Fine Arts areas (6 hours) Area III (12 hours) MTH 1125 (4) Calculus I** Select one Sequence for 8 hours Select one Sequence for 8 hours PHY 2252 (3) General Physics I Lab PHY 2253 (3) General Physics I Lab PHY 2253 (3) General Physics I Lab PHY 2253 (1) General Physics I Lab PHY 2263 (3) Physics I with Calculus PHY 2253 (1) General Physics I Lab PHY 2263 (3) Physics I with Calculus PHY 2253 (1) General Physics I Lab PHY 2263 (3) Physics I with Calculus PHY 2253 (1) General Physics I Lab PHY 2263 (3) Physics I with Calculus PHY 2253 (1) General Physics I Lab PHY 2263 (3) Physics I with Calculus PHY 2253 (1) General Physics I Lab PHY 2253 (1) General Physics I Lab PHY 2263 (3) Physics I with Calculus PHY 2263 (3) Physics I with Calculus PHY 2250 (1) General Physics I Lab PHY 2253 (1) General Physics I Lab PHY 2263 (3) Physics I with Calculus PHY 2263 (3) Physics I Lab PHY 2263 (3) Physics I Lab PHY 2263 (3) Physics I With Calculus PHY 2263 (3) Physics I With Calculus PHY 2263 (3) Physics I With Calculus PHY 2263 (3) Physics I With Calculus Conserved the following Cill Calculus OR PHY 2263 (3) Physics I With Calculus Conserved the following Cill Calculus OR PHY 2263 (3) Physics I With Calculus Conserved the following Cill Calculus OR PHY 2263 (3) Physics I With Calculus Conserved the following Cill Calculus OR PHY 2263 (3) Physics I With Calculus Conserved the following Cill Calculus OR PHY 2263 (3) Physics I With Calculus Conserved the following Cill Calculus OR PHY 2263 (3) Physics I Physics I Physics I Physics I Calculus OR PHY 2263 (3) Physics I Phys							
Communication, Sign Language, Interdisciplinary Studies, or other Humanities/Fine Arts areas (6 hours) Area III (12 hours) MTH 1125 (4) Calculus I** Select one Sequence for 8 hours PHY 2252 (3) General Physics I Lab PHY 2253 (3) General Physics I Lab OR PHY 2252 (1) General Physics I Lab OR PHY 2252 (3) Physics I with Calculus PHY 2253 (1) General Physics I Lab OR PHY 2252 (3) Physics I with Calculus PHY 2253 (1) General Physics I Lab Area IV (12 hours) Any 1000-2000 level course with a principal focus in History (3hrs) in sequence Any 1000-2000 level courses from the following Social Science, Psychology, Religion, Social Work, Sociology or other Social Science areas (9hrs) in sequence Area V (13 hours) Is 2241 (3) Computer Concepts STAT 2210 (3) Introduction to Statistics TROY 1101 (1) Orientation GIS 2201 (3) Intro to Spatial Computing using Python							
other Humanities/Fine Arts areas (6 hours) In and Analysis Area III (12 hours) In and Analysis MTH 1125 (4) Calculus I** Select one Sequence for 8 hours PHY 2252 (3) General Physics I Lab PHY 2253 (3) General Physics I Lab PHY 2253 (1) General Physics I Lab PHY 2253 (1) General Physics I Lab OR GEM 4405 (3) Route & Construction PHY 2253 (3) General Physics I Lab OR GEM 4409 (3) Hydrology PHY 2252 (1) General Physics I Lab OR GEM 4409 (3) Hydrology PHY 2262 (3) Physics I with Calculus PHY 2253 (1) General Physics I Lab PHY 2253 (1) General Physics I Lab PHY 2253 (1) General Physics I Lab PHY 2263 (3) Physics I with Calculus PHY 2253 (1) General Physics I Lab PHY 2253 (1) General Physics I Lab PHY 2253 (1) General Physics I Lab Choose one of the following GEM 4499 (2) Geomatics / GIS Projects OR GEM 4499 (2) Geomatics / GIS Projects Area IV (12 hours) In sequence Any 1000-2000							
Area ill (12 hours) GIS 3391 (3) Application of Geospatial Information Sciences MTH 1125 (4) Calculus I** Select one Sequence for 8 hours PHY 2252 (3) General Physics I Lab GEM 4405 (3) Route & Construction Lab PHY 2253 (3) General Physics I Lab GEM 4407 (3) Land Development PHY 2253 (1) General Physics II GEM 4407 (1) Land Development Lab OR GEM 4409 (1) Hydrology PHY 2262 (3) Physics I with Calculus GEM 4409 (1) Hydrology Lab OR GEM 4490 (1) Geomatics Capstone PHY 2262 (3) Physics I with Calculus GEM 4499 (2) Geomatics / GIS Projects PHY 2253 (1) General Physics I Lab GEM 4499 (2) Geomatics / GIS Projects PHY 2253 (1) General Physics I Lab GEM 4499 (2) Geomatics / GIS Projects PHY 2253 (1) General Physics II Lab Choose one of the following GIS 3395 (2) & 4496 Co-op. Work Exp. I & II 120 hours are required for graduation. Any 1000-2000 level course with a principal focus in History NOTE: Students must complete a six-hour sequence in Literature or History. This sequence must be within the same content areas for the selected disciplines (i.e. six hours in American Literature or six hours in World History). This requirement will be met in Area I. Area V (13 hours) Literature or history. Religion, Social Work, Sociology or other Social Science areas (9hrs) in sequence "Must have C		· · ·					
Area IV (12 hours)CiencesMTH 1125 (4) Calculus I**GEM 4405 (3) Route & Construction LabPHY 2252(3)General Physics I LabPHY 2253(1)General Physics I LabPHY 2253(1)General Physics I LabORGEM 4409 (3) HydrologyPHY 2262(3)Physics I with CalculusORGEM 4409 (1) Hydrology LabORGEM 4409 (2) Geomatics CapstonePHY 2262(3)Physics I with CalculusPHY 2263(3)Physics I LabPHY 2263(3)Physics I with CalculusPHY 2253(1)General Physics I LabPHY 2253(2)A 4490 (2)Geomatics CapstoneChoose one of the followingGEM 4409 (2)Geomatics CapstoneAny 1000-2000 level courses from the following SocialScience, Psychology, Religion, Social Work, Sociology orIs 2241 (3) Computer Con	outer fruitianilies/Fille Alts areas (o nours)						
MTH 1125 (4) Calculus I** GEM 4405 (3) Route & Construction Select one Sequence for 8 hours GEM 4405 (3) Route & Construction Lab PHY 2252 (1) General Physics I Lab GEM L405 (1) Route & Construction Lab PHY 2253 (3) General Physics II Lab GEM 4407 (3) Land Development Lab OR GEM 4407 (3) Intro to Global Positions OR GEM 4409 (1) Hydrology Lab PHY 2252 (3) Physics I with Calculus OR GEM 4409 (1) Geomatics Capstone PHY 2252 (1) General Physics I Lab PHY 2253 (3) Physics I with Calculus PHY 2253 (1) General Physics I Lab PHY 2253 (1) General Physics II Lab GEM 4490 (2) Geomatics / GIS Projects OR GEM 3395 (2) & 4496 Co-op. Work Exp. I & II Area IV (12 hours) Any 1000-2000 level course with a principal focus in History (3hrs) in sequence (3hrs) in sequence Georgraphy, History, Hospitality, Tourism, Sport Management, Human Services, Interdisciplinary Studies, Leadership, Nursing, Political Science, Psychology, Religion, Social Work, Sociology or other Social Science areas (9hrs) in sequence Area V (13 hours) Iss 2241 (3) Computer Concepts STAT 2210 (3) Introduction to Statistics TROY 1101 (1) Orientation G	Area III (12 hours)						
PHY 2252 (3) General Physics I PHY 2252 (1) General Physics I Lab GEM 4407 (1) Land Development Lab PHY 2253 (1) General Physics II GEM 4409 (3) Hydrology PHY 2253 (1) General Physics II Lab GEM 4409 (3) Hydrology Lab OR GEM 4409 (1) Hydrology Lab GEM 4409 (1) Geomatics Capstone PHY 2252 (3) Physics I with Calculus GEM 4499 (1) Geomatics / GIS Projects PHY 2253 (1) General Physics II Lab Choose one of the following PHY 2253 (1) General Physics II Lab Choose one of the following PHY 2253 (1) General Physics II Lab Choose one of the following PHY 2253 (1) General Physics II Lab Choose one of the following PHY 2253 (1) General Physics II Lab Choose one of the following Area IV (12 hours) (1) General Physics II Lab Choose one of the following Any 1000-2000 level course from the following Social Social Chours are required for graduation. Any 1000-2000 level courses from the following Social Social Science, Finance, Geography, History, Hospitality, Tourism, Sport Management, Human Services, Interdisciplinary							
PHY L252 (1) General Physics I Lab GEM L407 (1) Land Development Lab PHY L253 (3) General Physics II GEM L409 (3) Hydrology OR GEM L409 (3) Hydrology (3) Intro to Global Positions OR GEM L409 (1) Hydrology Lab PHY 2262 (3) Physics I with Calculus PHY 2263 (3) Physics I with Calculus PHY L253 (1) General Physics I Lab PHY 2263 (3) Physics II with Calculus PHY L253 (1) General Physics II Lab Area IV (12 hours) General Physics II Lab Choose one of the following Any 1000-2000 level courses from the following Social GEM 4499 (2) Geomatics / GIS Projects Area IV (12 hours) Any 1000-2000 level courses from the following Social Any 1000-2000 level courses from the following Social 120 hours are required for graduation. NOTE: Students must complete a six-hour sequence in Literature or History. This sequence must be within the same content areas for the selected disciplines (i.e. six hours in World History). This requirement will be met in Area I. Justice, Economics, Finance, Geography, History, Hospitality, Tourism, Sport Management, Human Services, Interdisciplinary Studies, Leadership, Nursing, Political Scince areas (9hrs) in sequence							
PHY 2253 (3) General Physics II PHY 2253 (1) General Physic II Lab OR GEM 4409 (3) Hydrology PHY 2252 (3) Physics I with Calculus PHY 2252 (1) General Physics I Lab PHY 2253 (3) Physics I with Calculus PHY 2253 (1) General Physics I Lab PHY 2253 (1) General Physics II Lab Area IV (12 hours) General Physics II Lab Choose one of the following Any 1000-2000 level courses from the following Social Gem 3395 (2) & 4496 Co-op. Work Exp. I & II Science disciplines: Antropology, Business, Criminal Justice, Economics, Finance, Geography, History, Hospitality, Tourism, Sport Management, Human Services, Interdisciplinary Studies, Leadership, Nursing, Political 120 hours are required for graduation. Area V (13 hours) Is 2241 (3) Computer Concepts Statistics STAT 2210 (3) Introduction to Statistics TROY 1101 (1) Orientation Gis 2201 (3) Intro to Spatial Computing using Python							
 PHY L253 (1) General Physic II Lab OR PHY 2262 (3) Physics I with Calculus PHY 2262 (1) General Physics I Lab PHY 2263 (3) Physics II with Calculus PHY 2263 (3) Physics II with Calculus PHY 2263 (1) General Physics II Lab Area IV (12 hours) Any 1000-2000 level course with a principal focus in History (3hrs) in sequence Any 1000-2000 level courses from the following Social Science disciplines: Anthropology, Business, Criminal Justice, Economics, Finance, Geography, History, Hospitality, Tourism, Sport Management, Human Services, Interdisciplinary Studies, Leadership, Nursing, Political Science, Psychology, Religion, Social Work, Sociology or other Social Science areas (9hrs) in sequence Area V (13 hours) IS 2241 (3) Introduction to Statistics TROY 1101 (1) Orientation GIS 2201 (3) Intro to Spatial Computing using Python Gen 2499 (2) Geomatics Capstone Choose one of the following GEM 4499 (2) Geomatics / GIS Projects OR GEM 3395 (2) & 4496 Co-op. Work Exp. I & II 120 hours are required for graduation. NOTE: Students must complete a six-hour sequence in Literature or History. This sequence must be within the same content areas for the selected disciplines (i.e. six hours in American Literature or six hours in World History). This requirement will be met in Area II or Area I. **Must have C or better and pre-requisites must be met 							
ORGEM 4410 (3) Intro to Global Positions GEM 4490 (1) Geomatics CapstonePHY 2262(3)Physics I with Calculus PHY L252(1)General Physics I Lab PHY 2263Choose one of the following GEM 4499 (2) Geomatics / GIS Projects ORPHY 2253(1)General Physics II LabGEM 4499 (2) Geomatics / GIS Projects ORArea IV (12 hours) Any 1000-2000 level course with a principal focus in History (3hrs) in sequence120 hours are required for graduation. NOTE: Students must complete a six-hour sequence in Literature or History. This sequence must be within the same content areas for the selected disciplines (i.e. six hours in American Literature or six hours in World History). This requirement will be met in Area I. NOTE: Students must complete a six-hour sequence in Literature or History. This sequence must be within the same content areas for the selected disciplines (i.e. six hours in American Literature or six hours in World History). This requirement will be met in Area I. **Must have C or better and pre-requisites must be metArea V (13 hours) IS 2241 (3) Computer Concepts STAT 2210 (3) Introduction to Statistics TROY 1101 (1) Orientation GIS 2201 (3) Introduction to Statistics TROY 1101 (1) Orientation							
ORGEM 4490 (1) Geomatics CapstonePHY 2262(3)Physics I with CalculusPHY L252(1)General Physics I LabPHY 2263(3)Physics II with CalculusPHY L253(1)General Physics II LabArea IV (12 hours)General Physics II LabAny 1000-2000 level course with a principal focus in History120 hours are required for graduation.Any 1000-2000 level courses from the following SocialScience disciplines: Anthropology, Business, CriminalJustice, Economics, Finance, Geography, History, Hospitality, Justice, Economics, Finance, Geography, History, Hospitality, Interdisciplinary Studies, Leadership, Nursing, Political Science, Psychology, Religion, Social Work, Sociology or other Social Science areas (9hrs) in sequenceServices, Interdisciplinary Studies, Leadership, Nursing, Political Staft 2210 (3) Introduction to Statistics TROY 1101 (1) Orientation GIS 2201 (3) Introduction to Statistics TROY 1101 (1) Orientation GIS 2201 (3) Introduction to Statistics TROY 1101 (1) Orientation GIS 2201 (3) Introduction to StatisticsFinance Statistics TROY 1101 (1) Orientation GIS 2201 (3) Introduction to StatisticsFinance Statistics TROY 1101 (1) Orientation GIS 2201 (3) Introduction to StatisticsFinance Statistics TROY 1101 (1) Orientation GIS 2201 (3) Introduction to StatisticsFinance Statistics TROY 110 (1) Orientation							
 PHY L252 (1) General Physics I Lab PHY 2263 (3) Physics II with Calculus PHY L253 (1) General Physics II Lab Area IV (12 hours) Any 1000-2000 level course with a principal focus in History (3hrs) in sequence Any 1000-2000 level courses from the following Social Science disciplines: Anthropology, Business, Criminal Justice, Economics, Finance, Geography, History, Hospitality, Tourism, Sport Management, Human Services, Interdisciplinary Studies, Leadership, Nursing, Political Science, Psychology, Religion, Social Work, Sociology or other Social Science areas (9hrs) in sequence Area V (13 hours) IS 2241 (3) Computer Concepts STAT 2210 (3) Introduction to Statistics TROY 1101 (1) Orientation GiS 2201 (3) Intro to Spatial Computing using Python GEM 4499 (2) Geomatics / GIS Projects OR GEM 3395 (2) & 4496 Co-op. Work Exp. I & II 120 hours are required for graduation. <i>NOTE</i>: Students must complete a six-hour sequence in Literature or History. This sequence must be within the same content areas for the selected disciplines (i.e. six hours in American Literature or six hours in World History). This requirement will be met in Area II or Area I. **Must have C or better and pre-requisites must be met 	OR						
 PHY L252 (1) General Physics I Lab PHY 2263 (3) Physics II with Calculus PHY L253 (1) General Physics II Lab Area IV (12 hours) Any 1000-2000 level course with a principal focus in History (3hrs) in sequence Any 1000-2000 level courses from the following Social Science disciplines: Anthropology, Business, Criminal Justice, Economics, Finance, Geography, History, Hospitality, Tourism, Sport Management, Human Services, Interdisciplinary Studies, Leadership, Nursing, Political Science, Psychology, Religion, Social Work, Sociology or other Social Science areas (9hrs) in sequence Area V (13 hours) IS 2241 (3) Computer Concepts STAT 2210 (3) Introduction to Statistics TROY 1101 (1) Orientation GiS 2201 (3) Intro to Spatial Computing using Python GEM 4499 (2) Geomatics / GIS Projects OR GEM 3395 (2) & 4496 Co-op. Work Exp. I & II 120 hours are required for graduation. <i>NOTE</i>: Students must complete a six-hour sequence in Literature or History. This sequence must be within the same content areas for the selected disciplines (i.e. six hours in American Literature or six hours in World History). This requirement will be met in Area II or Area I. **Must have C or better and pre-requisites must be met 	PHY 2262 (3) Physics I with Calculus	Choose one of the following					
 PHY 2263 (3) Physics II with Calculus PHY L253 (1) General Physics II Lab Area IV (12 hours) Any 1000-2000 level course with a principal focus in History (3hrs) in sequence Any 1000-2000 level courses from the following Social Science disciplines: Anthropology, Business, Criminal Justice, Economics, Finance, Geography, History, Hospitality, Tourism, Sport Management, Human Services, Interdisciplinary Studies, Leadership, Nursing, Political Science, Psychology, Religion, Social Work, Sociology or other Social Science areas (9hrs) in sequence Area V (13 hours) IS 2241 (3) Computer Concepts STAT 2210 (3) Introduction to Statistics TROY 1101 (1) Orientation GIS 2201 (3) Intro to Spatial Computing using Python PHY 2263 (3) Physics II with Calculus Gen 3395 (2) & 4496 Co-op. Work Exp. I & II Computer Concepts STAT 2210 (3) Intro duction to Statistics TROY 1101 (1) Orientation GIS 2201 (3) Intro to Spatial Computing using Python 							
 Area IV (12 hours) Any 1000-2000 level course with a principal focus in History (3hrs) in sequence Any 1000-2000 level courses from the following Social Science disciplines: Anthropology, Business, Criminal Justice, Economics, Finance, Geography, History, Hospitality, Tourism, Sport Management, Human Services, Interdisciplinary Studies, Leadership, Nursing, Political Science, Psychology, Religion, Social Work, Sociology or other Social Science areas (9hrs) in sequence Area V (13 hours) IS 2241 (3) Computer Concepts STAT 2210 (3) Introduction to Statistics TROY 1101 (1) Orientation GIS 2201 (3) Intro to Spatial Computing using Python 120 hours are required for graduation. NOTE: Students must complete a six-hour sequence in Literature or History. This sequence must be within the same content areas for the selected disciplines (i.e. six hours in American Literature or six hours in World History). This requirement will be met in Area II or Area I. **Must have C or better and pre-requisites must be met 	PHY 2263 (3) Physics II with Calculus						
Any 1000-2000 level course with a principal focus in History (3hrs) in sequence Any 1000-2000 level courses from the following Social Science disciplines: Anthropology, Business, Criminal Justice, Economics, Finance, Geography, History, Hospitality, Tourism, Sport Management, Human Services, Interdisciplinary Studies, Leadership, Nursing, Political Science, Psychology, Religion, Social Work, Sociology or other Social Science areas (9hrs) in sequence Area V (13 hours) IS 2241 (3) Computer Concepts STAT 2210 (3) Introduction to Statistics TROY 1101 (1) Orientation GIS 2201 (3) Intro to Spatial Computing using Python	PHY L253 (1) General Physics II Lab	GEM 3395 (2) & 4496 Co-op. Work Exp. I & II					
Any 1000-2000 level course with a principal focus in History (3hrs) in sequence Any 1000-2000 level courses from the following Social Science disciplines: Anthropology, Business, Criminal Justice, Economics, Finance, Geography, History, Hospitality, Tourism, Sport Management, Human Services, Interdisciplinary Studies, Leadership, Nursing, Political Science, Psychology, Religion, Social Work, Sociology or other Social Science areas (9hrs) in sequence Area V (13 hours) IS 2241 (3) Computer Concepts STAT 2210 (3) Introduction to Statistics TROY 1101 (1) Orientation GIS 2201 (3) Intro to Spatial Computing using Python	Area IV (12 hours)	120 hours are required for graduation.					
Any 1000-2000 level courses from the following Social Science disciplines: Anthropology, Business, Criminal Justice, Economics, Finance, Geography, History, Hospitality, Tourism, Sport Management, Human Services, Interdisciplinary Studies, Leadership, Nursing, Political Science, Psychology, Religion, Social Work, Sociology or other Social Science areas (9hrs) in sequence Area V (13 hours) IS 2241 (3) Computer Concepts STAT 2210 (3) Introduction to Statistics TROY 1101 (1) Orientation GIS 2201 (3) Intro to Spatial Computing using Python		· · · · · · · · · · · · · · · · · ·					
Any 1000-2000 level courses from the following Social Science disciplines: Anthropology, Business, Criminal Justice, Economics, Finance, Geography, History, Hospitality, Tourism, Sport Management, Human Services, Interdisciplinary Studies, Leadership, Nursing, Political Science, Psychology, Religion, Social Work, Sociology or other Social Science areas (9hrs) in sequence Area V (13 hours) IS 2241 (3) Computer Concepts STAT 2210 (3) Introduction to Statistics TROY 1101 (1) Orientation GIS 2201 (3) Intro to Spatial Computing using Python	(3hrs) in sequence	NOTE: Students must complete a six-hour sequence in					
Science disciplines: Anthropology, Business, Criminal Justice, Economics, Finance, Geography, History, Hospitality, Tourism, Sport Management, Human Services, Interdisciplinary Studies, Leadership, Nursing, Political Science, Psychology, Religion, Social Work, Sociology or other Social Science areas (9hrs) in sequence Area V (13 hours) IS 2241 (3) Computer Concepts STAT 2210 (3) Introduction to Statistics TROY 1101 (1) Orientation GIS 2201 (3) Intro to Spatial Computing using Python	Any 1000 2000 level courses from the following Casial						
Justice, Economics, Finance, Geography, History, Hospitality, Tourism, Sport Management, Human Services, Interdisciplinary Studies, Leadership, Nursing, Political Science, Psychology, Religion, Social Work, Sociology or other Social Science areas (9hrs) in sequence Area V (13 hours) IS 2241 (3) Computer Concepts STAT 2210 (3) Introduction to Statistics TROY 1101 (1) Orientation GIS 2201 (3) Intro to Spatial Computing using Python							
Tourism, Sport Management, Human Services, Interdisciplinary Studies, Leadership, Nursing, Political Science, Psychology, Religion, Social Work, Sociology or other Social Science areas (9hrs) in sequence Area V (13 hours) IS 2241 (3) Computer Concepts STAT 2210 (3) Introduction to Statistics TROY 1101 (1) Orientation GIS 2201 (3) Intro to Spatial Computing using Python							
Science, Psychology, Religion, Social Work, Sociology or other Social Science areas (9hrs) in sequence Area V (13 hours) IS 2241 (3) Computer Concepts STAT 2210 (3) Introduction to Statistics TROY 1101 (1) Orientation GIS 2201 (3) Intro to Spatial Computing using Python							
other Social Science areas (9hrs) in sequence Area V (13 hours) IS 2241 (3) Computer Concepts STAT 2210 (3) Introduction to Statistics TROY 1101 (1) Orientation GIS 2201 (3) Intro to Spatial Computing using Python		*** And have O an half in the set of the					
Area V (13 hours) IS 2241 (3) Computer Concepts STAT 2210 (3) Introduction to Statistics TROY 1101 (1) Orientation GIS 2201 (3) Intro to Spatial Computing using Python		niviust nave C or better and pre-requisites must be met					
IS 2241 (3) Computer Concepts STAT 2210 (3) Introduction to Statistics TROY 1101 (1) Orientation GIS 2201 (3) Intro to Spatial Computing using Python							
STAT 2210 (3) Introduction to Statistics TROY 1101 (1) Orientation GIS 2201 (3) Intro to Spatial Computing using Python							
TROY 1101 (1) Orientation GIS 2201 (3) Intro to Spatial Computing using Python							
GIS 2201 (3) Intro to Spatial Computing using Python							
	GIS 2201 (3) Intro to Spatial Computing using Python						
FREE ELECTIVES: 12 hours	EREE ELECTIVES: 12 hours						