

My DEGREE MAP
COLLEGE OF ARTS AND SCIENCES APPROVED ACADEMIC PLAN
SURVEYING AND GEOMATICS SCIENCES PROGRAM
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 th 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 BEEN COMPLETED	
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		
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 APPLICATION					
DR - Department Recommended			MINIMUM HOURS REQUIRED FOR DEGREE		120

SURVEYING AND GEOMATICS SCIENCES PROGRAM CURRICULUM (120 hours)

SPECIALIZED GENERAL STUDIES REQUIREMENTS (55 HOURS)

Area I (6 hours)

ENG 1101 (3) Composition I **
ENG 1102 (3) Composition II **

Area II (12 hours)

1000-2000 level course within Literature (3 hours)

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)

MTH 1125 (4) Calculus I**

Select one Sequence for 8 hours

PHY 2252	(3)	General Physics I
PHY L252	(1)	General Physics I Lab
PHY 2253	(3)	General Physics II
PHY L253	(1)	General Physics II Lab

OR

PHY 2262	(3)	Physics I with Calculus
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
MTH 2230 (3) Applied Linear Algebra

FREE ELECTIVES: 12 hours

PROGRAM REQUIREMENTS (53 HOURS)

GEM 1100 (2) Computer-Aided Drafting 1
GEM 1101 (2) Computer-Aided Drafting 11
GEM 2220 (3) Basics of Surveying
GEM L220 (1) Basics of Surveying Lab
GEM 3309 (3) Land Survey Principles
GEM L309 (1) Land Survey Principles Lab
GEM 3310 (3) Land Survey Practice
GEM L310 (1) Land Survey Practice Lab
GEM 3330 (3) Advance Measurement Analysis
GEM L330 (1) Advance Measurement Analysis Lab
GEM 3366 (3) Photogrammetry
GEM 4408 (3) Geodesy & Geodetics
GEM 3379 (3) Least Squares Adjustment
GIS 3390 (3) Fundamentals of Geographical Information and Analysis
GIS 3391 (3) Application of Geospatial Information Sciences
GEM 4405 (3) Route & Construction
GEM L405 (1) Route & Construction Lab
GEM 4407 (3) Land Development
GEM L407 (1) Land Development Lab
GEM 4409 (3) Hydrology
GEM L409 (1) Hydrology Lab
GEM 4410 (3) Intro to Global Positions
GEM 4490 (1) 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*