

**SURVEYING ENGINEERING
BACHELOR OF SCIENCE DEGREE
Curriculum Guide Sheet**

Total semester hours required for graduation: 133

FIRST YEAR-FALL SEMESTER		CREDITS/GRADE
SURE 110	Fundamentals of Surveying (Co-Req. MATH 120)	4 _____
SURE 115	Introduction to Computer Mapping	1 _____
MATH 220	Analytical Geometry & Calculus 1 (MATH 130 or 126)	5 _____
ENGL 150	English 1	3 _____
FSUS 100		1 _____
ELECTIVE	Cultural Enrichment Elective	3 _____
		(17)

FIRST YEAR-SPRING SEMESTER		
CENG 220	Engineering Surveying (SURE 110) OR SURE 230 Advanced Surveying (SURE 110)	4 _____
MATH 230	Analytical Geometry & Calculus 11 (MATH 220)	5 _____
CONM 121	Materials Properties & Testing (MATH 116) OR SURE 215 Surveying Computations (SURE 110)	3 _____
ENGL 250	English 2 (ENGL 150)	3 _____
		(15)

SECOND YEAR-FALL SEMESTER		
SURE 215	Surveying Computations (SURE 110) CONM 121 Mat'ls Properties & Testing (MATH 116 or 120)	3 _____
CENG 240	Engineering Statics (MATH 230, Co- Req PHYS 241)	3 _____
PHYS 241	General Physics 1 (MATH 220 C- or better)	5 _____
CHEM 121	General Chemistry (CHEM 103, MATH 115)	5 _____
		(16)

SECOND YEAR- SPRING SEMESTER)		
SURE 230	Advanced Surveying (SURE 110, SURE 115) OR CENG 220 Engineering Surveying (SURE 110)	4 _____
SURE 272	Programming Applications in Geomatics (SURE 215, MATH 130)	2 _____
MATH 322	Linear Algebra (MATH 220)	3 _____
PHYS 242	General Physics 2 (PHYS 241, MATH 230 C- or better)	5 _____
SURE 331/HUMN 331	Ethics & Professionalism in Engineering & Tech. (ENGL 150)	3 _____
		(17)

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THIRD YEAR-FALL SEMESTER		CREDIT/GRADE
SURE 365	Legal Aspects of Surveying 1* (Co-Req. SURE 215, ENGL 250)	3 _____
SURE 372	Adjustment Computations 1 (SURE 230, MATH 230, SURE 272, MATH 322)	3 _____
GISC 239	Remote Sensing (Co-Req. MATH 120)	3 _____
GEOL 131	Geology and Land-Use Management	3 _____
COMM 121	Fundamentals of Public Speaking	3 _____
ELECTIVE	Social Awareness Elective	3 _____
		(18)
THIRD YEAR- SPRING SEMESTER		
GISC 225	Principles of GIS	3 _____
SURE 340	Photogrammetry (SURE 110)	3 _____
SURE 373	Adjustment Computations 2 (SURE 372)	3 _____
SURE 420	Prof. Practice of Surveying* (SURE 365, ENGL 250)	3 _____
SURE 452	Geodesy 1 (SURE 230, SURE 372)	4 _____
		(16)
FOURTH YEAR-FALL SEMESTER		
SURE 366	Evid. & Proce. for Boundary Location (SURE 365)	3 _____
GISC 425	Technical Issues in GIS & Cartography (SURE 272, GISC 225)	3 _____
SURE 440	Advanced Photogrammetry (SURE 340, SURE 373)	3 _____
SURE 453	Geodesy 2 (SURE 373, SURE 452)	4 _____
ELECTIVE	Cultural Enrichment Elective	3 _____
		(16)
FOURTH YEAR- SPRING SEMESTER		
CENG 321	Hydraulics Engineering (PHYS 242, MATH 230)	4 _____
CENG 421	Soils Engineering (CONM 121, MATH 220)	4 _____
SURE 465	Legal Aspects of Surveying 2* (SURE 365, ENGL 250, Senior Status)	3 _____
CENG 485	Sustainable Land Use (Senior Status)	4 _____
ELECTIVE	Social Awareness Elective	3 _____
		(18)

***Writing Intensive Courses**