



**Bachelor of Science in Surveying Engineering (SURV)**

**First Year**

**Fall Semester**

Code	Title	Credits	Prerequisites	Corequisites
PHYS220	Physics for Engineers	3	PHYS161 - ENGL101 - PHYS160	MATH210
CULT200	Introduction to Arab - Islamic Civilization	3		
MATH225	Linear Algebra with Applications	3	ENGL051 - MATH161	
MENG225	Engineering Drawing & CAD	3		
MATH210	Calculus II	3	MATH161 - MATH160	
ENGL201	Composition and Research Skills	3	ENGL151	
Total		18		

**Spring Semester**

Code	Title	Credits	Prerequisites	Corequisites
MATH310	Probability & Statistics for Scientists & Engineers	3	MATH210 - ENGL201	
EENG250	Electric Circuits I	3	PHYS161 - PHYS160 - MATH161 - MATH160 - ENGL051	MATH210
ENGL251	Communication Skills	3	ENGL201	
MENG250	Statics	3	MATH161 - MATH160 - PHYS161 - PHYS160 - ENGL051	MATH210
MATH270	Ordinary Differential Equations	3	MATH210	MATH225
SURV251	Introduction to Surveying Engineering	3	CHEM160 - ENGL051	MENG225 - MATH210 - ENGL101 - SURV251L
SURV251L	Introduction to Surveying Engineering Lab	1	ENGL051	ENGL101 - SURV251
Total		19		

**Second Year**

**Fall Semester**

Code	Title	Credits	Prerequisites	Corequisites
SURV335	Surveying Drawing & CAD	3	MENG225	
SURV305	Surveying I	3	SURV251 - MATH210	SURV305L
SURV305L	Surveying Practice I Lab	1		SURV305
SURV315	Geology	3	ENGL201	
ENGG300	Engineering Economics	3	ENGL201 - MATH225 - MATH220	
SURV325	Cartography	3		SURV305
MATH220	Calculus III	3	MATH210	
Total		19		

**Spring Semester**

Code	Title	Credits	Prerequisites	Corequisites
SURV355L	Surveying Practice II Lab	1	SURV305	SURV355
SURV355	Surveying II	3	SURV305	SURV355L
SURV385	Computer Aided Drafting for Surveyors	3	SURV335	
SURV375	Topometric Calculus I	3	SURV305	

ARAB200	Arabic Language and Literature	3		
	Elective	3		
SURV365	Geodesy I	3	SURV325	
Total		19		

### Third Year

#### Fall Semester

Code	Title	Credits	Prerequisites	Corequisites
SURV414	Cadastral Surveying and Construction LAW	3	SURV355	
SURV420	Surveying application I	3	SURV355	
SURV405	Photogrammetry	3	MATH310 - SURV355	
SURV445	Geodesy II	3	SURV365	
SURV435	Theory of Measurement Errors	3	MATH310 - SURV355	
SURV425	Topometric Calculus II	3	SURV375	
Total		18		

#### Spring Semester

Code	Title	Credits	Prerequisites	Corequisites
	Elective	3		
SURV495	Senior Project	3	SURV420	
SURV465	Spatial Geodesy (GPS I)	3	SURV445	
SURV455	Geographic Information Systems I	3	SURV325 - SURV405	
ENGG450	Engineering Ethics and Professional Practice	3	ENGL251	ENGG300
Total		15		

### Major Elective Courses

Code	Title	Credits	Prerequisites	Corequisites
SURV474	Urban Planning and Land Subdivision	3	SURV414	
SURV477	Land Design and Site Development	3	SURV414	
SURV478	Quality Control and Quantity Surveying	3	SURV425 - SURV385 - SURV355	
SURV479	Cadastral Information Surveying	3	SURV414	