

CURRICULUM REVISION FORM 2 (Semestral Offering)

Program **Bachelor of Science in Geodetic Engineering**
 Department **Engineering Sciences**
 College **College of Engineering and Information Technology**
 Date of Last Revision: **03/27/2009**

FIRST YEAR

FIRST SEMESTER		DESCRIPTION	UNITS	Units		Contact Hrs.		PREREQUISITE
COURSE	NO.			LEC	LAB	Lec.	Lab.	
Math	1.7	College Algebra	3	3	0	3	0	
Math	2.1	Plane and Spherical Trigonometry	3	3	0	3	0	
IT	1	Computer Concepts and Fundamentals	3	2	1	2	3	
ES	1	Engineering Drawing	2	1	1	1	3	
Fil	1	Komunikasyon sa Akademikong Filipino	3	3	0	3	0	
SocSci	10	Gen. Sociology with Pop. Edu.	3	3	0	3	0	
ENG	1	Study & Thinking Skills	3	3	0	3	0	Passing NSAE
PE	1	Physical Fitness	2	2	0	2	0	
NSTP	1	CMT/LTS	3	3	0			
Total			25	23	2	20	6	

SECOND SEMESTER		DESCRIPTION	UNITS	Units		Contact Hrs.		PREREQUISITE
COURSE	NO.			LEC	LAB	Lec.	Lab.	
Math	6.4	Analytic Geometry	3	3	0	3	0	Math 1.7, Math 2.1
Math	4	Advanced Algebra	3	3	0	3	0	Math 1.7
Eng	2	Writing the Discipline	3	3	0	3	0	Engl 1
Chem	10	General Chemistry I (lec)	3	3	0	3	0	
Chem	10.1	General Chemistry I (lab)	2	0	2	0	6	
Fil	2	Pagbasa at Pagsulat tungo sa Pananaliksik	3	3	0	3	0	Fil 1
PE	2	Rhythmic Activities	2	2	0	2	0	PE 1
Lit	1	Philippine Literature*	3	3	0	3	0	
ES	2	Computer - Aided Drafting (CAD)	1	0	1	0	3	ES 1, IT 1
NSTP	2	CMT/LTS	3	3	0			NSTP 1
Total			26	23	3	20	9	

SECOND YEAR

FIRST SEMESTER		DESCRIPTION	UNITS	Units		Contact Hrs.		PREREQUISITE
COURSE	NO.			LEC	LAB	Lec.	Lab.	
Phys	10	General Physics 1 (Mechanics)	3	3	0	3	0	Math 1.7 & Math 2.1
Phys	10.1	Physics I (lab)	1		1		3	Math 1.7 & Math 2.1
Math	6.5	Solid Mensuration	2	2	0	2	0	Math 6.4
Math	9.1	Differential Calculus	4	4	0	4	0	Math 4, Math 6.4
GE	100	General Surveying I (lec)	2	2	0	2	0	Math 1.7 & Math 2.1
GE	100.1	General Surveying I (lab)	2	0	1	0	6	Math 1.7 & Math 2.1
Philo	2	Intro to Logic	3	3	0	3	0	
SocSci	1	General Psychology	3	3	0	3	0	
PE	3	Individual and Dual Sports	2	2	0	2	0	PE 1
Total			22	19	2	19	9	

SECOND SEMESTER		DESCRIPTION	UNITS	Units		Contact Hrs.		PREREQUISITE
COURSE	NO.			LEC	LAB	Lec.	Lab.	
Phys	12	General Physics (Electricity and Magnetism)	3	3	0	3	0	Phys 10
Phys	12.1	Physics 2 (lab)	1		1		3	Phys 10.1
Math	9.2	Integral Calculus	4	4	0	4	0	Math 9.1
GE	101	General Surveying II (lec)	2	2	0	2	0	GE 100
GE	101.1	General Surveying II (lab)	2	0	2	0	6	GE 100.1
CSC	101	Fund. Of Problem Solving and Programning I	3	2	1	2	3	IT 1, Math 1.7
SocSci	20	Phil. History, Roots and Development	3	3	0	3	0	
Eng	4	Technical Writing	3	3	0	3	0	Eng 2
PE	4	Major/Team Sports	2	2	0	2	0	PE 1
Total			23	19	4	19	12	

THIRD YEAR

FIRST SEMESTER		DESCRIPTION	UNITS	Units		Contact Hrs.		PREREQUISITE
COURSE	NO.			LEC	LAB	Lec.	Lab.	
ES	3	Differential Equations for Engineers	3	3	0	3	0	Math 9.2
ES	4	Statics of Rigid Bodies	3	3	0	3	0	Phys 10, 10.1, Math 9.2

GE	102	Construction and Industrial Surveys	4	2	2	2	6	GE 101, GE 101.1
GE	103	Cartography	2	1	1	1	3	GE 101, GE 101.1 & Math 9.2
GE	104	Property Survey (Lec)	3	3	0	3	0	GE 101, GE 101.1
GE	104.1	Property Survey (Lab)	2	0	2	0	6	GE 101, GE 101.1
SocSci	21	Phil. Government and New Constitution	3	3	0	3	0	
ES	13	Environmental Engineering	2	2	0	2	0	Chem 10, Chem 10.1
ES	8	Prob. and Stat for Scientists and Engineers	3	3	0	3	0	Math 9.2
Total			25	20	5	20	15	

SECOND SEMESTER								
COURSE	NO.	DESCRIPTION	UNITS	Units		Contact Hrs.		PREREQUISITE
				LEC	LAB	Lec.	Lab.	
ES	5	Dynamics of Rigid Bodies	3	3	0	3	0	Phys 10, 10.1, Math 9.2
ES	9	Advanced Engineering Math	3	3	0	3	0	ES 3
GE	105	Theory of Errors and Adjustments	3	2	1	2	3	ES 3; IT 1; CSC 101
GEOL	100	Principles of Geology	3	3	0	3	0	Chem 10
GE	106	Land Registration Laws	2	2	0	2	0	Third Year Standing
GE	107	Geometric Geodesy	3	3	0	3	0	GE 103
ME	101	Thermodynamics I	3	3	0	3	0	Phys 12, Phys 12.1, Math 9.2
GE	108	Practical Astronomy	3	3	0	3	3	GE 104, GE 104.1
Total			23	22	1	22	6	

* Substitute Courses:

Philo 1 - Philosophy of Man
Humanities - World Literature

FOURTH YEAR

FIRST SEMESTER								
COURSE	NO.	DESCRIPTION	UNITS	Units		Contact Hrs.		PREREQUISITE
				LEC	LAB	Lec.	Lab.	
ES	7	Fluid Mechanics	4	3	1	3	3	ES 5
EE	40	Basic Electrical Engineering	3	3	0	3	0	Phys 12, Phys 12.1
ES	6	Mechanics of Deformable Bodies	4	4	0	4	0	ES 5
GE	109	Geodetic Astronomy	3	2	1	2	3	GE 108
GE	110	Physical Geodesy	3	3	0	3	0	GE 107
SocSci	22	Life and Works of Rizal	3	3	0	3	3	
Hum	1	Introduction to Humanities	3	3	0	3	0	
Total			23	21	2	21	9	

SECOND SEMESTER								
COURSE	NO.	DESCRIPTION	UNITS	Units		Contact Hrs.		PREREQUISITE
				LEC	LAB	Lec.	Lab.	
ES	14	Research Methods	3	3	0	3	0	Eng 4, 4th yr standing
ES	10	Engineering Economy	3	3	0	3	0	Math 9.2
GE	111	Photogrammetry 1	3	2	1	2	3	GE 101, 101.1
GE	112	Laws on Property	1	1	0	1	0	4th Yr. Standing
ES	12	Engineering Management	3	3	0	3	0	Math 9.2
GE	113	Remote Sensing	3	2	1	2	3	Phys 12, 12.1, GE 103
GE	114	Satellite Geodesy	3	3	0	3	0	GE 109, GE 107, co-req GE 113
GE	115	Map Projections	3	2	1	2	3	GE 109, GE 107
GE	116	Safety Management for GE	1	1		1		GE 109
Total			23	20	3	20	9	

FOURTH YEAR - SUMMER								
COURSE	NO.	DESCRIPTION	UNITS	Units		Contact Hrs.		PREREQUISITE
				LEC	LAB	Lec.	Lab.	
GE	500	On the Job Training (360 hours)	3					4th Year Standing
<i>(Note: An additional 500.00 pesos per student will be collected to defray expenses during the supervision and linkages activities which will be deposited under the college TF-OJT account)</i>								

FIFTH YEAR

FIRST SEMESTER								
COURSE	NO.	DESCRIPTION	UNITS	Units		Contact Hrs.		PREREQUISITE/ COREQUISITE*
				LEC	LAB	Lec.	Lab.	
GE	117	Development Planning	3	2	1	2	3	GE 113, GE 111
GE	118	Introduction to Geographic Information System	3	3	0	3	0	GE 117*, GE 113; GE 114
GE	119	Photogrammetry 2	4	2	2	2	6	GE 111
GE	120	Public Land Law, Laws on Natural Resources, and Mining Laws	3	3	0	3	0	4th Year Standing
GE	121	Mine Surveying	2	1	1	1	3	GE 104, GE 104.1
GE	122	Geodetic Surveying	4	2	2	2	6	GE 110
GE	300	Special Studies in GE	3	1	2	1	6	Fifth Year Standing
Total			22	14	8	14	24	

SECOND SEMESTER								
COURSE	NO.	DESCRIPTION	UNITS	Units		Contact Hrs.		PREREQUISITE
				LEC	LAB	Lec.	Lab.	

GE	123	Hydrography	3	2	1	2	3	GE 101, GE 101.1
GE	124	Land Administration and Management	3	3	0	3	0	All GE Law Subjects
GE	125	Geodetic Engineering Laws, Contracts and Ethics	2	2	0	2	0	co-req GE 124
GE	126	Geodetic Computations and Adjustment	4	2	2	2	6	GE 107, ES 8
		Elective 1	3	3	0	3	0	5th Year Standing
		Elective 2	3	3	0	3	0	5th Year Standing
Total			18	15	3	15	9	

GRAND TOTAL 233

ELECTIVES			UNITS	Units		Contact Hrs.		PREREQUISITE
COURSE	NO.	DESCRIPTION		LEC	LAB	Lec.	Lab.	
GE	127	Advanced Geographic Information System	3	2	1	2	3	ESM 171
GE	128	Aerial Triangulation Adjustment	3	3	0	3		
GE	129	Photogrammetric Project Design	3	3	0	3		
GE	130	Educational Field Trips and Seminar						
EM	207	Sustainable Management of Terrestrial and Aquatic Resources	3	3	0	3		