

**BACHELOR OF SCIENCE IN CIVIL ENGINEERING (BSCE)  
(LIST OF COURSES BY SEMESTER)**

**First Year, First Semester**

Course No.	Course Title	Units	Hrs/Wk			Prerequisite(s)
			Lec	Lab	Total	
Eng 1	College English I	3	3	0	3	None
Fil 1	Sining ng Komunikasyon	3	3	0	3	None
Math 17	Algebra and Trigonometry	6	6	0	6	None
Hist 1	Philippine History	3	3	0	3	None
Hist 5	Life and Works of Rizal	3	3	0	3	None
PE 1	Physical Fitness and Health	2	2	0	2	None
NSTP 1	National Service Training Program 1	(3)				None
Total		20	20	0	20	

**First Year, Second Semester**

Course No.	Course Title	Units	Hrs/Wk			Prerequisite(s)
			Lec	Lab	Total	
Eng 2	College English II	3	3	0	3	Eng 1
Eng 3	Oral Communication	3	3	0	3	None
Chem 12	Fundamentals of Chemistry	3	3	0	3	Math 17
Chem 12.1	Fundamentals of Chemistry Lab	1	0	3	3	Math 17
Math 51	Analytic Geometry and Calculus I	6	6	0	6	Math 17
Hist 3	History of the Muslim Filipinos and the Indigenous Peoples of MINSUPALA	3	3	0	3	None
PE 2	Martial Arts/Dance	2	2	0	2	PE 1
NSTP 2	National Service Training Program 2	(3)				NSTP 1
Total		21	20	3	23	

**Second Year, First Semester**

Course No.	Course Title	Units	Hrs/Wk			Prerequisite(s)
			Lec	Lab	Total	
Eng 4	Introduction to Literature	3	3	0	3	Eng 2
Bio 1	Basic Biology	3	3	0	3	Math 17
Math 61	Analytic Geometry and Calculus II	6	6	0	6	Math 51
Phys 21	General Physics I	3	3	0	3	Math 51
Phys 21.1	Laboratory Physics I	1	0	3	3	Math 51
PE 3	Individual and Dual Sports	2	2	0	2	PE 1
ES 51	Engineering Drawing	2	0	6	6	Math 51
Total		20	17	9	26	

### Second Year, Second Semester

Course No.	Course Title	Units	Hrs/Wk			Prerequisite(s)
			Lec	Lab	Total	
Math 71	Analytic Geometry and Calculus III	6	6	0	6	Math 61
Phys 31	General Physics II	3	3	0	3	Phys 21
Phys 31.1	Laboratory Physics II	1	0	3	3	Phys 21
Hum 1	Introduction to Humanities	3	3	0	3	None
PE 4	Team Sports	2	2	0	2	PE 1
CSc 101	Introduction to Computer Programming	3	2	3	5	Math 17
Geol 40	Engineering Geology	2	2	0	2	Chem 12, Phys 21
CE 90	Civil Engineering Drafting	2	0	6	6	ES 51
Total		22	18	12	30	

### Third Year, First Semester

Course No.	Course Title	Units	Hrs/Wk			Prerequisite(s)
			Lec	Lab	Total	
Pol Sci 2	Philippine Government and Constitution, Agrarian Reform, Taxation, Family Planning and Population Education	3	3	0	3	None
Phys 41	General Physics III	3	3	0	3	Phys 21, Phys 21.1
Phys 41.1	Laboratory Physics III	1	0	3	3	Phys 21, Phys 21.1
ES 61	Statics of Rigid Bodies	3	3	0	3	Math 71, Phys 21, Phys 21.1
ES 81	Mathematical Methods of Engineering I	3	3	0	3	Math 71
ES 85	Probability and Statistics in Engineering	3	3	0	3	Math 71
GE 41	Elementary Surveying	4	3	3	6	3rd Year Standing
Total		20	18	6	24	

### Third Year, Second Semester

Course No.	Course Title	Units	Hrs/Wk			Prerequisite(s)
			Lec	Lab	Total	
EE 123	Elementary Electrical Engineering	3	2	3	5	Math 71, Phys 41
ES 62	Dynamics of Rigid Bodies	3	3	0	3	ES 61
ES 64	Mechanics of Deformable Bodies	3	3	0	3	ES 61
ES 84	Numerical Methods	3	2	3	5	ES 81, CSc 101
GE 42	Higher Surveying	3	2	3	5	GE 41
CE 121	Introduction to Environmental Engineering	3	3	0	3	Chem 12, Bio 1
Total		18	15	9	24	

### Fourth Year, First Semester

Course No.	Course Title	Units	Hrs/Wk			Prerequisite(s)
			Lec	Lab	Total	
ES 65	Mechanics of Fluids	3	3	0	3	ES 62
ES 91	Engineering Economy	3	3	0	3	4 <sup>th</sup> Year Standing
GE 43	Curves and Earthworks	3	2	3	5	GE 42
CE 101	Hydrology	3	3	0	3	Geol 40, ES 85
CE 151	Structural Theory I	3	3	0	3	ES 64, CSc 101
CE 171	Materials of Construction and Testing	3	2	3	5	ES 64
Total		18	16	6	22	

### Fourth Year, Second Semester

Course No.	Course Title	Units	Hrs/Wk			Prerequisite(s)
			Lec	Lab	Total	
CE 102	Hydraulic Engineering	4	3	3	6	CE 101
CE 131	Geotechnical Engineering I	4	3	3	6	ES 64, Geol 40
CE 141	Transportation Engineering I	3	3	0	3	GE 43 &/or conc w/ CE 131
CE 152	Structural Theory II	3	3	0	3	CE 151
CE 161	Design of Concrete Structures I	3	3	0	3	CE 171, CE 151
CE 199	Undergraduate Thesis	3	3	0	3	4th Yr Stnd'g
Total		20	18	6	24	

Summer: CE Practicum (320 Hours)

### Fifth Year, First Semester

Course No.	Course Title	Units	Hrs/Wk			Prerequisite(s)
			Lec	Lab	Total	
CE 132	Geotechnical Engineering II	3	3	0	3	CE 131
CE 142	Transportation Engineering II	3	3	0	3	CE 141, ES 85
CE 153	Matrix Analysis of Structures	3	3	0	3	CE 152, ES 84
CE 162	Design of Concrete Structures II	3	3	0	3	CE 152, CE 161
CE 163	Design of Steel Structures	3	3	0	3	CE 171, CE 152
CE 164	Design of Timber Structures	2	2	0	2	CE 171, CE 152
Total		17	17	0	17	

### Fifth Year, Second Semester

Course No.	Course Title	Units	Hrs/Wk			Prerequisite(s)
			Lec	Lab	Total	
BusE 66	New Enterprise Development in Philippine Environment	3	3	0	3	4th Year Standing
STS 1	Science, Technology and Society	3	3	0	3	5th Year Standing
CE 103	Water Supply and Sewerage	3	3	0	3	Chem 12, CE 102
CE 172	Construction Engineering and Project Management	3	3	0	3	ES 91
CE 173	Bids, Contracts, Specifications. Ethics and Engineering Laws	3	3	0	3	Cand for Grad
CE 197	Civil Engineering Projects	3	2	3	5	Cand for Grad
Total		18	17	3	20	