



2020 CURRICULUM FOR BACHELOR OF SCIENCE IN CIVIL ENGINEERING (BSCE)

IMPORTANT : REGISTRATION IN ANY COURSE WITHOUT ALL THE PREREQUISITES, CORRECT SEQUENCE AND AUTHORIZED LOAD SHALL NOT BE GIVEN ANY CREDIT REGARDLESS OF THE GRADE OBTAINED. EVALUATION IS TENTATIVE AND MAY BE REVISED FOR SOME VALID CAUSES OR REASONS OR IF OMISSIONS AND/OR LACK OF UNITS CREDITED BE DISCOVERED LATER.

Student's Name and Signature

COURSE CODE	DESCRIPTIVE TITLE	Lecture Hours			Laboratory Hours			PREREQUISITE(S)
		Lecture Hours	Laboratory Hours	Credit Units	Lecture Hours	Laboratory Hours	Credit Units	
FIRST YEAR, FIRST SEMESTER (20 UNITS)								
GEC 003	The Contemporary World	3	0	3				
GEC 004	Mathematics in the Modern World	3	0	3				
GEC 007	Science, Technology and Society	3	0	3				
MATH 018	Calculus 1	3	0	3				
CHM 001	Chemistry for Engineers	3	3	4				
CE 101	Civil Engineering Orientation	2	0	2				
PE 101	Physical Education 1	2	0	2				
NSTP 001	National Service Training Program 1	(3)	0	(3)				
FIRST YEAR, SECOND SEMESTER (22 UNITS)								
MATH 019	Calculus 2	3	0	3			MATH 018	
PHYS 111	Calculus-Based Physics	3	3	4				
GEC 001	Understanding the Self	3	0	3				
GEC 008	Ethics	3	0	3				
CE 102	Civil Engineering Drawing and Plans	0	3	1				
CE 202	Geology for Civil Engineers	3	0	3			CHM 001	
GEE 001B	GE Elective 1 - Gender and Society	3	0	3				
PE 102	Physical Education 2	2	0	2			PE 101	
NSTP 002	National Service Training Program 2	(3)	0	(3)			NSTP 001	
SECOND YEAR, FIRST SEMESTER (28 UNITS)								
MATH 021	Differential Equations	3	0	3			MATH 019	
ME 304	Engineering Economics	3	0	3			2nd Year Standing	
EE 200B	Engineering Utilities 1	3	0	3			PHYS 111	
ME 201B	Engineering Utilities 2	3	0	3			PHYS 111	
CE 023	Engineering Data Analysis	3	0	3			MATH 018	
MATH 022A	Linear Algebra with MATLAB	2	3	3			MATH 018	
CE 201	Statics of Rigid Bodies	3	0	3			MATH 019, PHYS 111	
CE 103	Surveying 1	1	3	2			CE 102	
CE 104	Building Systems Design	2	3	3			CE 102	
PE 201	Physical Education 3	2	0	2			PE 102	
SECOND YEAR, SECOND SEMESTER (29 UNITS)								
CE 203	Surveying 2	2	3	3			CE 103	
CE 316	Numerical Solutions to CE Problems	2	3	3			MATH 021	
MATH 024A	Advanced Engineering Mathematics for CE	3	0	3			MATH 021	
CE 308	Hydrology	2	0	2			CE 309 (C)	
CE 309	Fluid Mechanics	2	3	3			CE 023, CE 308(C)	
CE 204	Dynamics of Rigid Bodies	2	0	2			CE 201	
CE 205	Mechanics of Deformable Bodies	4	0	4			CE 201	
CE 206	Construction Materials and Testing	2	3	3			CE 023, CE 205 (C)	
CE 207	Quantity Surveying	1	3	2			CE 104	
CE 208	Integration Course 1 for CE	2	0	2			MATH 024A(C), CE 204(C), CE 205(C)	
PE 202	Physical Education 4	2	0	2			PE 201	
THIRD YEAR, FIRST SEMESTER (25 UNITS)								
GEE 002B	GE Elective 2 - Living in the IT Era	3	0	3			GEE 001B	
TECH 101	Introduction to Engineering Entrepreneurship	3	0	3			2nd Year Standing	
CE 319	Hydraulics Engineering	4	3	5			CE 309	
CE 305	Principles of Earthquake Engineering	3	0	3			CE 315 (C)	
CE 315	Structural Theory	3	3	4			CE 205	
CE 302	Highway and Railroad Engineering	3	0	3			CE 203	
CE 304	Geotechnical Engineering 1	3	3	4			CE 023, CE 202, CE 206	
THIRD YEAR, SECOND SEMESTER (26 UNITS)								
CE 443	Specialized Course 1 (CE Track Elective 1)	3	0	3			See track for pre-requisite(s)	
CE 444	Specialized Course 2 (CE Track Elective 2)	3	0	3			See track for pre-requisite(s)	
CE 306	Principles of Steel Design	3	3	4			CE 305, CE 315	
CE 307	Principles of Reinforced Concrete Design	3	3	4			CE 305, CE 315	
CE 448	Prestressed Concrete Design	3	0	3			CE 307 (C)	
CE 432	Principles of Foundation Design	3	3	4			CE 304, CE 307 (C)	
CE 310	Principles of Transportation Engineering	3	0	3			CE 302	
CE 311	Integration Course 2 for CE	2	0	2			CE 208, CE 206, CE 304, CE 319	

NO STUDENT SHALL BE ALLOWED TO TAKE FOURTH YEAR PROFESSIONAL COURSES UNLESS HE HAS COMPLETED THE BASIC AND THE THIRD YEAR COURSES INCLUDING PE AND NSTP.

COURSE CODE	DESCRIPTIVE TITLE	Lecture Hours			Laboratory Hours			PREREQUISITE(S)
		Lecture	Discussion	Other	Laboratory	Other	Credit Units	
FOURTH YEAR, FIRST SEMESTER (23 UNITS)								
CE	445	Specialized Course 3 (CE Track Elective 3)	3	0	3			See track for pre-requisite(s)
CE	446	Specialized Course 4 (CE Track Elective 4)	3	0	3			See track for pre-requisite(s)
CE	447	Specialized Course 5 (CE Track Elective 5)	3	0	3			See track for pre-requisite(s)
CE	434	Construction Methods and Project Management	2	3	3			CE 207
CE	431	CE Laws, Ethics and Contracts	2	0	2			4th Year Standing
GEC	002	Readings in Philippine History	3	0	3			
CE	403A	Civil Engineering Computer Aided Drafting	0	3	1			
CE	436	Computer Fundamentals, Programming and Applications in CE	0	6	2			
CE	435	CE Design Project 1	2	3	3			CE 306, CE 307, CE 448, CE 432
FOURTH YEAR, SECOND SEMESTER (22 UNITS)								
CE	441	CE Design Project 2	1	6	3			CE 435, Graduating
GEE	005A	GE Elective 3 - Environmental Science and Engineering	3	0	3			GEE 002B
GEC	006	Art Appreciation	3	0	3			
IE	101	Engineering Management	2	0	2			
GEM	001	Life and Works of Rizal	3	0	3			
GEC	005	Purposive Communication	3	0	3			
CE	400A	On-the-Job Training for CE (240 Hrs.)	3	240	3			4th Year Standing
CE	412	Integration Course 3 for CE	2	0	2			CE 311, CE 435, Graduating, CE 441 (C)
ELECTIVE COURSES								
NOTE: A STUDENT MAY CHOOSE ANY OF THE TRACK ELECTIVES BELOW AND ONCE A TRACK ELECTIVE IS CHOSEN, ALL COURSES IN THE TRACK MUST BE TAKEN.								
Construction Engineering and Management								
CEM	301	Project Construction and Management	3	0	3			CEM 302 (C)
CEM	302	Advanced Construction Methods and Equipment	3	0	3			CEM 301 (C)
CEM	303	Construction Cost Engineering	3	0	3			CEM 301, CEM 302
CEM	304	Construction Occupational Safety and Health (COSH)	3	0	3			CEM 301, CEM 302
CEM	305	Database Management in Construction	3	0	3			CEM 301, CEM 302
Geotechnical and Gei-Environmental Engineering								
GTECH	301	Geotechnical Engineering 2 (Rock Mechanics)	3	0	3			CE 304(P), GTECH 302 (C)
GTECH	302	Geotechnical Earthquake Engineering	3	0	3			CE 304(P), GTECH 301(C)
GTECH	303	Advanced Foundation Engineering	3	0	3			CE 432(C), GTECH 301, GTECH 302
GTECH	304	Ground Improvement	3	0	3			CE 432(C), GTECH 301, GTECH 302
GTECH	305	Computer Applications in Geotechnical Engineering	3	0	3			CE 432(C), GTECH 301, GTECH 302
Transportation Engineering								
TREN	301	Transportation System Planning and Design	3	0	3			CE 302 (P), TREN 302(C)
TREN	302	Highway Engineering	3	0	3			CE 302 (P), TREN 301(C)
TREN	303	Airport Design	3	0	3			TREN 301, TREN 302
TREN	304	Ports and Harbors	3	0	3			TREN 301, TREN 302
TREN	305	Computer Applications in Transportation Engineering	3	0	3			TREN 301, TREN 302
Water Resources Engineering (WRE)								
WRE	301	Water Resources Engineering	3	0	3			CE 308, CE 309, WRE 302(C)
WRE	302	Water Supply Planning and Development	3	0	3			CE 308, CE 309, WRE 301(C)
WRE	303	Flood Control and Drainage Engineering	3	0	3			WRE 301, WRE 302
WRE	304	Coastal Engineering	3	0	3			WRE 301, WRE 302
WRE	305	Irrigation Engineering	3	0	3			WRE 301, WRE 302
Railway Engineering								
RWE	001	Introduction to Railway System and Engineering	3	0	3			RWE 002(C)
RWE	002	Railway Management and Governance	3	0	3			RWE 001(C)
RWE	003	Railway Operations	3	0	3			RWE 001, RWE 002
RWE	004	Advanced Topic on Railway Engineering	3	0	3			RWE 001, RWE 002
RWE	005	Maintenance of Building Facilities and Track System	3	0	3			RWE 001, RWE 002
Quantity Surveying								
CEM	301A	Project Construction and Management	3	0	3			QS 001(C)
QS	001	Design Economics and Cost Planning	2	3	3			CEM 301A(C)
QS	002	Quantification and Costing of Works with Digital Measurement	2	3	3			QS 001
QS	003	Procurement and Tendering in Construction	3	0	3			QS 001
QS	004	Contract Practice and Administration including Cost Reporting	3	0	3			QS 001

TOTAL NO. OF UNITS201

CREDENTIALS SUBMITTED:

- () F138 () PSA Birth Certificate
- () GMC () Transfer Credential
- () F137A () TOR

DEFICIENCY/IES

Evaluated by: _____

Date: _____

Received by: _____

Date: _____