



2023 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				PREREQUISITE(S)
			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	141	Calculus 1	4	0	4	
MATH	131	Engineering Mathematics	3	0	3	
CE	101	Civil Engineering Orientation	2	0	2	
PE	001	Physical Activities Toward Health & Fitness 1 (PATHFit 1)	2	0	2	
NSTP	001	National Service Training Program 1	(3)	0	(3)	
FIRST YEAR, SECOND SEMESTER (26 UNITS)						
MATH	242	Calculus 2	4	0	4	MATH 141 (P), MATH 131 (P)
PHYS	111	Calculus-Based Physics	3	3	4	MATH 141 (P)
GEC	008	Ethics	3	0	3	
MATH	022A	Linear Algebra with MATLAB	2	3	3	MATH 141 (P)
CHM	001	Chemistry for Engineers	3	3	4	
CE	103	Surveying 1	1	3	2	MATH 141 (P)
CE	102	Civil Engineering Drawing and Plans	0	3	1	
GEE	001B	GE Elective 1 - Gender and Society	3	0	3	
PE	002	Physical Activities Toward Health & Fitness 2 (PATHFit 2)	2	0	2	PE 001 (P)
NSTP	002	National Service Training Program 2	(3)	0	(3)	NSTP 001 (P)
SECOND YEAR, FIRST SEMESTER (27 UNITS)						
MATH	021	Differential Equations	3	0	3	MATH 242 (P)
ME	304	Engineering Economics	3	0	3	2nd Year Standing (P)
EE	200B	Engineering Utilities 1	3	0	3	PHYS 111 (P)
ME	201B	Engineering Utilities 2	3	0	3	PHYS 111 (P)
CE	023	Engineering Data Analysis	3	0	3	MATH 141 (P)
CE	403A	Civil Engineering Computer Aided Drafting	0	3	1	CE 102 (P)
CE	201	Statics of Rigid Bodies	3	0	3	MATH 242 (P), PHYS 111 (P)
CE	203	Surveying 2	2	3	3	CE 103 (P)
CE	104	Building Systems Design	2	3	3	CE 102 (P)
PE	003	Physical Activities Toward Health & Fitness 3 (PATHFit 3)	2	0	2	PE 002 (P)
SECOND YEAR, SECOND SEMESTER (25 UNITS)						
CE	316	Numerical Solutions to CE Problems	2	3	3	MATH 021 (P)
MATH	024A	Advanced Engineering Mathematics for CE	3	0	3	MATH 021 (P)
CE	202	Geology for Civil Engineers	3	0	3	CHM 001 (P)
CE	309	Fluid Mechanics	2	3	3	CE 023 (P), CE 201 (P)
CE	204	Dynamics of Rigid Bodies	2	0	2	CE 201 (P)
CE	205	Mechanics of Deformable Bodies	4	0	4	CE 201 (P)
CE	206	Construction Materials and Testing	2	3	3	CE 023 (P), CE 205 (C)
CE	207	Quantity Surveying	1	3	2	CE 104 (P)
PE	004	Physical Activities Toward Health & Fitness 4 (PATHFit 4)	2	0	2	PE 003 (P)
THIRD YEAR, FIRST SEMESTER (27 UNITS)						
GEE	002B	GE Elective 2 - Living in the IT Era	3	0	3	GEE 001B (P)
GEC	006	Art Appreciation	3	0	3	
CE	308	Hydrology	2	0	2	CE 309 (P)
CE	319	Hydraulics Engineering	4	3	5	CE 309 (P)
CE	305	Principles of Earthquake Engineering	3	0	3	CE 315 (C)
CE	315	Structural Theory	3	3	4	CE 205 (P)
CE	302	Highway and Railroad Engineering	3	0	3	CE 203 (P)
CE	304	Geotechnical Engineering 1	3	3	4	CE 023 (P), CE 202 (P), CE 206 (P)
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 (P), CE 315 (P)
CE	307	Principles of Reinforced Concrete Design	3	3	4	CE 305 (P), CE 315 (P)
CE	432	Principles of Foundation Design	3	3	4	CE 304 (P), CE 307 (C)
CE	310	Principles of Transportation Engineering	3	0	3	CE 302 (P)
CE	314	Methods of Civil Engineering Research	2	3	3	CE 023 (P), CE 305 (P), CE 315 (P), CE 304 (P), CE 319 (P)
CE	328	Integration Course 1 for CE	1	3	2	CE 315 (P), CE 304 (P), CE 319 (P)
THIRD YEAR, SUMMER (9 UNITS)						
GEC	001	Understanding the Self	3	0	3	
GEC	002	Readings in Philippine History	3	0	3	
GEM	001	Life and Works of Rizal	3	0	3	

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)
						Credit Units	
FOURTH YEAR, FIRST SEMESTER (27 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	448	Prestressed Concrete Design	3	0	3	CE 307 (P), CE 432 (P)	
GEC	005	Purposive Communication	3	0	3		
CE	436	Computer Fundamentals, Programming and Applications in CE	0	6	2		
CE	434	Construction Methods and Project Management	2	3	3	CE 207 (P)	
CE	431	CE Laws, Ethics and Contracts	2	0	2	4th Year Standing (P)	
CE	465	Integration Course 2 for CE	1	3	2	CE 328 (P), 4th Year Standing (P)	
CE	435	CE Design Project 1	2	3	3	CE 306 (P), CE 307 (P), CE 448 (C), CE 432 (P)	
FOURTH YEAR, SECOND SEMESTER (16 UNITS)							
CE	441	CE Design Project 2	1	6	3	CE 435 (P), Graduating (P)	
GEE	005A	GE Elective 3 - Environmental Science and Engineering	3	0	3	GEE 002B (P)	
IE	101	Engineering Management	2	0	2		
TECH	101A	Technology Entrepreneurship	3	0	3	Graduating (P)	
CE	400A	On-the-Job Training for CE (240 Hrs.)	3	240	3	4th Year Standing (P)	
CE	475	Integration Course 3 for CE	1	3	2	CE 465 (P), CE 435 (P), Graduating (P)	
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	CE 206 (P), CE 207 (P), CEM 302 (C)	
CEM	302	Advanced Construction Methods and Equipment	3	0	3	CE 206 (P), CE 207 (P), CEM 301 (C)	
CEM	303	Construction Cost Engineering	3	0	3	CE 434 (C), CEM 301 (P), CEM 302 (P)	
CEM	304	Construction Occupational Safety and Health (COSH)	3	0	3	CE 434 (C), CEM 301 (P), CEM 302 (P)	
CEM	305	Database Management in Construction	3	0	3	CE 434 (C), CEM 301 (P), CEM 302 (P)	
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 (P), GTECH 301 (P), GTECH 302 (P)	
GTECH	304	Ground Improvement	3	0	3	CE 432 (P), GTECH 301 (P), GTECH 302 (P)	
GTECH	305	Computer Applicationa in Geotechnical Engineering	3	0	3	CE 432 (P), GTECH 301 (P), GTECH 302 (P)	
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	CE 310 (P), TREN 301 (P), TREN 302 (P)	
TREN	304	Ports and Harbors	3	0	3	CE 310 (P), TREN 301 (P), TREN 302 (P)	
TREN	305	Computer Applications in Transportation Engineering	3	0	3	CE 310 (P), TREN 301 (P), TREN 302 (P)	
Water Resources Engineering (WRE)							
WRE	301	Water Resources Engineering	3	0	3	CE 308(P), CE 319 (P), WRE 302 (C)	
WRE	302	Water Supply Planning and Development	3	0	3	CE 308 (P), CE 319 (P), WRE 301 (C)	
WRE	303	Flood Control and Drainage Engineering	3	0	3	WRE 301 (P), WRE 302 (P)	
WRE	304	Coastal Engineering	3	0	3	WRE 301 (P), WRE 302 (P)	
WRE	305	Irrigation Engineering	3	0	3	WRE 301(P), WRE 302 (P)	
Railway Engineering							
RWE	001	Introduction to Railway System and Engineering	3	0	3	CE 302 (P), RWE 002 (C)	
RWE	002	Railway Management and Governance	3	0	3	CE 302 (P), RWE 001 (C)	
RWE	003	Railway Operations	3	0	3	CE 310 (P), RWE 001 (P), RWE 002 (P)	
RWE	004	Advanced Topic on Railway Engineering	3	0	3	CE 310 (P), RWE 001 (P), RWE 002 (P)	
RWE	005	Maintenance of Building Facilities and Track System	3	0	3	CE 310 (P), RWE 001 (P), RWE 002 (P)	
Structural Engineering							
STE	001	Computer Applications in Structural Engineering	2	3	3	CE 307 (C) , CE 432 (C), CE 306 (C), STE 002 (C)	
STE	002	Structural Design of Buildings, Towers and other Structures	2	3	3	CE 307 (C), CE 432 (C), CE 306 (C), STE 001 (C)	
STE	003	Bridge Engineering	2	3	3	CE 448 (C) , STE 001 (P), STE 002 (P)	
STE	004	Advanced Design of Concrete Members (Reinforced/Precast/Masonry)	3	0	3	CE 307 (P), CE 432 (P), STE 001 (P), STE 002 (P)	
STE	005	Advanced Design of Steel Members (Structural/Cold-Formed)	3	0	3	CE 306 (P), CE 432 (P), STE 001 (P), STE 002 (P)	
Quantity Surveying							
CEM	301A	Project Construction and Management	3	0	3	CE 206 (P), CE 207 (P), QS 001 (C)	
QS	001	Design Economics and Cost Planning	2	3	3	CE 206 (P), CE 207 (P), CEM 301A (C)	
QS	002	Quantification and Costing of Works with Digital Measurement	2	3	3	CE 434 (C), QS 001 (P)	
QS	003	Procurement and Tendering in Construction	3	0	3	CE 434 (C), QS 001 (P)	
QS	004	Contract Practice and Administration including Cost Reporting	3	0	3	CE 434 (C), QS 001 (P)	

TOTAL NO. OF UNITS209

CREDENTIALS SUBMITTED:

DEFICIENCY/IES

Evaluated by: _____

Date: _____

() F138 () PSA Birth Certificate

() GMC () Transfer Credential

() F137A () TOR

Received by: _____

Date: _____