

Name: _____



ANDRES BONIFACIO COLLEGE
College Park, Dipolog City
SCHOOL OF ENGINEERING



BACHELOR OF SCIENCE IN CIVIL ENGINEERING
(STRUCTURAL ENGINEERING SPECIALIZATION)
EFFECTIVE AY 2023-2024

FIRST YEAR

Grade	Course No.	Description	Lec hrs per w+eek	Lab hrs per week	Total unit	Pre-requisite
FIRST SEMESTER						
_____	EM 11	Calculus 1	5	0	5	
_____	ES 11	Engineering Drawing and Plans	0	3	1	
_____	Chem 111	Chemistry for Engineers	3	3	4	
_____	ER 11	Special Enhancement Course for Engineering	3	0	3	
_____	CE 11	Civil Engineering Orientation	2	0	2	
_____	GEC 111	Understanding the Self	3	0	3	
_____	GEC 211	Mathematics in the Modern World	3	0	3	
_____	GEC 123	Purposive Communication	3	0	3	
_____	PATHFiT 1	Movement Competency Training	2	0	2	
_____	NSTP 111	National Service Training Program I	(3)	0	(3)	
			24(3)	6	26(3)	

SECOND SEMESTER						
_____	EM 16	Calculus 2	5	0	5	EM11,ER11,GEC211
_____	Phy 121	Physics for Engineers	3	3	4	EM11,ER11,GEC211
_____	ES 16	Computer-Aided Drafting	0	3	1	ES11, ER11
_____	GE 18	Principles of Geology	3	0	3	Chem111,EM11,ER11
_____	GEC 122	Art Appreciation	3	0	3	
_____	GEC 113	Contemporary World	3	0	3	
_____	Rizal 121	Rizal's Life, Works, and Writings	3	0	3	
_____	PATHFiT 2	Exercise-based Fitness Activities	2	0	2	PATHFiT1
_____	NSTP 121	National Service Training Program II	(3)	0	(3)	NSTP111
			22(3)	6	24(3)	

SECOND YEAR

FIRST SEMESTER						
_____	EM 21	Differential Equations	3	0	3	EM16
_____	EM 22	Engineering Data Analysis	3	0	3	EM16
_____	ES 21	Statics of Rigid Bodies	3	0	3	Phy121, EM16
_____	ES 22	Computer Programming 1	1	3	2	ER11
_____	GE 1	Fundamentals of Surveying	3	3	4	ES11, Phy121
_____	GEC 112	Readings in Philippine History	3	0	3	
_____	Lit 311	Philippine Literature	3	0	3	
_____	SSP 123	Indigenous People's Studies with Peace Education	3	0	3	
_____	PATHFiT 3	Dance/ Sports/ Martial Arts/ Group Exercise/ Outdoor and Adventure Activities	2	0	2	PATHFiT2
			24	6	26	

SECOND SEMESTER						
_____	ES 26	Dynamics of Rigid Bodies	3	0	3	EM21, ES21
_____	ES 27	Mechanics of Deformable Bodies	4	0	4	Co-req. ES26
_____	ES 28	Computer Programming 2	0	3	1	ES22
_____	CE 26	Construction Materials & Testing	2	3	3	Co-req. ES27
_____	MST 122	Living in the IT Era	3	0	3	
_____	GEC 124	Science, Technology and Society	3	0	3	
_____	GEC 115	Gender and Society	3	0	3	
_____	IC 111	Life and Works of Andres Bonifacio	2	0	2	
_____	PATHFiT 4	Dance/ Sports/ Martial Arts/ Group Exercise/ Outdoor and Adventure Activities	2	0	2	PATHFiT3
			22	6	24	

THIRD YEAR

FIRST SEMESTER

_____	EM	31	Numerical Methods and Analysis	3	3	4	EM21, EM28
_____	ES	31	Engineering Economics	3	0	3	3 rd Year Standing
_____	CE	31	Structural Theory	3	3	4	ES26, ES27
_____	CE	32	Highway and Railroad Engineering	3	0	3	GE19, ES26, ES27
_____	CE	33	Building Systems Design	2	3	3	ES16, CE26
_____	CE	34	Geotechnical Engineering 1 (Soil Mechanics)	3	3	4	GE18, ES26, ES27
_____	EE	30	Engineering Utilities 1 – Basic EE	3	0	3	Phy121
_____	ME	30	Engineering Utilities 2 – Basic ME	<u>3</u>	<u>0</u>	<u>3</u>	Phy121
				23	12	27	

SECOND SEMESTER

_____	ES	36	Engineering Management	3	0	3	ES31
_____	ES	37	Methods of Research	3	0	3	3 rd Yr. Standing
_____	CE	36	Principles of Reinforced/Pre-stressed Concrete	3	3	4	CE31
_____	CE	37	Principles of Steel Design	2	3	3	CE31
_____	CE	38	Hydraulics	4	3	5	CE31
_____	CE	39	Hydrology	2	0	2	Co-req. CE38
_____	CE	40	Construction Occupational Safety and Health	3	0	3	3 rd Year Standing
_____	CE	35	Quantity Surveying	1	3	2	CE33
_____	FL	321	Arabic Language	<u>3</u>	<u>0</u>	<u>3</u>	3 rd Yr. Standing
				24	12	28	

SUMMER

_____	OJT	1	On-the-Job Training (240 hours)	(2 units)	(1 unit)	3	4 th Year Standing
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FOURTH YEAR

FIRST SEMESTER

_____	ES	41	Technopreneurship 101	3	0	3	4 th Year Standing
_____	CE	42	Principles of Transportation Engineering	3	0	3	CE32, ES36
_____	CE	41	Construction Methods and Project Management	3	0	3	CE35, ES36
_____	CES	41	Design of Steel Structures	3	0	3	CE37
_____	CES	42	Earthquake Engineering	3	0	3	CE31, GE18
_____	Proj	1	Project Study 1	1	3	2	4 th Year Standing
_____	ER	41	Engineering Review 1	<u>3</u>	<u>0</u>	<u>3</u>	4 th Year Standing
				19	3	20	

SECOND SEMESTER

_____	CE	47	Construction Quality Control and Specifications	2	0	2	CE41
_____	CE	48	CE Laws, Ethics and Contracts	2	0	2	CE37,CE38,CE41,CE42
_____	CE	49	Reinforced Concrete Design	3	0	3	CE41,CE36
_____	CES	45	Bridge Engineering	3	0	3	4 th Year Standing
_____	CES	47	Pre-stressed Concrete Design	3	0	3	CE41,CE36
_____	Proj	2	Project Study 2	1	3	2	Proj1
_____	ER	46	Engineering Review 2	3	0	3	ER41
_____	GEC	121	Ethics	<u>3</u>	<u>0</u>	<u>3</u>	4 th Year Standing
				20	3	21	

Note: All subjects taken without prior completion of the pre-requisite will not be credited.

SUMMARY			
Classification/Field/Course		CHED Requirement	ABC Requirement
I. TECHNICAL COURSES			
	A. Mathematics	15	20
	B. Natural/Physical Science	10	11
	C. Basic Engineering Sciences	23	26
	D. Allied Courses	6	6
	E. Professional Courses (Common)	49	51
	F. Professional Courses-Specialized (minimum)	15	18
	G. On-the-Job Training (minimum of 240 hours)	3	3
	Sub-total	121	135
II. NON-TECHNICAL COURSES			
	A. General Education Courses (please refer to CMO 20, s. 2013)	24	24
	B. GEC Elective/Mandated Courses	12	12
	C. Institutional Courses		20
	D. Physical Education	8	8
	E. National Service Training Program	6	6
	Sub-total	50	70
	GRAND TOTAL	171	205

Evaluated by

ENGR. REY C. BASADRE
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Course No.	Descriptive Title	Units											
		Math	Natural/ Physical Sci.	Basic Eng'g Sci.	Allied	Prof. (Common)	Prof. (Specialized)	OJT	Gen. Educ.	GEC Elec./ Mandated	Institutional	Physical Educ.	NSTP
SECOND SEMESTER													
ES26	Dynamics of Rigid Bodies			3									
ES27	Mechanics of Deformable Bodies			4									
ES28	Computer Programming 2			1									
CE26	Construction Materials & Testing					3							
MST122	Living in the IT Era									3			
GEC124	Science, Technology and Society								3				
GEC115	Gender and Society									3			
IC111	Life and Works of Andres Bonifacio										2		
PATHFit4	Dance/ Sports/ Martial Arts/ Group Exercise/ Outdoor and Adventure Activities											2	
THIRD YEAR													
FIRST SEMESTER													
EM31	Numerical Methods and Analysis	4											
ES31	Engineering Economics			3									
CE31	Structural Theory					4							
CE32	Highway and Railroad Engineering					3							
CE33	Building Systems Design					3							
CE34	Geotechnical Engineering 1 (Soil Mechanics)					4							
EE30	Engineering Utilities 1 – Basic EE				3								
ME30	Engineering Utilities 2 – Basic ME				3								
SECOND SEMESTER													
ES36	Engineering Management			3									
ES37	Methods of Research										3		
CE36	Principles of Reinforced/ Pre-stressed Concrete					4							
CE37	Principles of Steel Design					3							
CE38	Hydraulics					5							
CE39	Hydrology					2							
CE40	Construction Occupational Safety and Health						3						
CE35	Quantity Surveying					2							
FL321	Arabic Language										3		
SUMMER													
OJT1	On-the-Job Training (240 hours)							3					

Course No.	Descriptive Title	Units											
		Math	Natural/ Physical Sci.	Basic Eng'g Sci.	Allied	Prof. (Common)	Prof. (Specialized)	OJT	Gen. Educ.	GEC Elec./ Mandated	Institutional	Physical Educ.	NSTP
<u>FOURTH YEAR</u>													
FIRST SEMESTER													
ES41	Technopreneurship 101			3									
CE42	Principles of Transportation Engineering					3							
CE41	Construction Methods and Project Management					3							
CES41	Design of Steel Structures						3						
CES42	Earthquake Engineering						3						
Proj1	Project Study 1					2							
ER41	Engineering Review 1										3		
SECOND SEMESTER													
CE47	Construction Quality Control and Specifications					2							
CE48	CE Laws, Ethics and Contracts					2							
CE49	Reinforced Concrete Design						3						
CES45	Bridge Engineering						3						
CES47	Pre-stressed Concrete Design						3						
Proj2	Project Study 2					2							
ER46	Engineering Review 2										3		
GEC121	Ethics								3				
Total Units		20	11	26	6	51	18	3	24	12	20	8	6
<i>Nothing Follows</i>													