



# CENTRAL PHILIPPINE ADVENTIST COLLEGE

## BACHELOR OF SCIENCE IN CIVIL ENGINEERING

Specialized in  
**CONSTRUCTION ENGINEERING AND MANAGEMENT**  
**CURRICULUM 2020 Based on CMO 92., S. 2017**

<b>1st Year - First Semester</b>							
No.	Course Number		Course Title	Number of Hours		Units	Prerequisite/ (Co-requisite)
				Lecture	Laboratory		
1	MATH	111	College Algebra	3	0	3	STEM or Non STEM
2	MATH	121	Plane & Spherical Trigonometry	3	0	3	STEM or Non STEM
3	MATH	131	Calculus 1	4	0	4	MATH 111/MATH 132
4	CHEM	111	Chemistry for engineers	3	3	4	None
5	CEBS	101	Civil Engineering Orientation	2	0	2	None
6	GEC	3	Mathematics in Modern World	3	0	3	None
7	GEC	1	Understanding the Self	3	0	3	None
8	PE	1	PE 1	2	0	2	None
9	NSTP	1	NSTP 1	3	0	3	None
10	WOED	1	Work Education 1	2	0	2	None
				<b>28</b>	<b>3</b>	<b>29</b>	<b>31-Contact Hours/Wk</b>

<b>1st Year - Second Semester</b>							
No.	Course Number		Course Title	Number of Hours		Units	Prerequisite/ (Co-requisite)
				Lecture	Laboratory		
1	MATH	142	Analytic Geometry	2	0	2	MATH 111 & 121
2	MATH	152	Solid Mensuration	2	0	2	MATH 111 & 121
3	MATH	162	Calculus 2	4	0	4	MATH 152
4	PHSC	112	Physics for Engineers (Calculus Based)	3	3	4	MATH 131
5	COMP	112	Computer Fundamental and Programming	0	6	2	None
6	CEDR	112	Engineering Drawing and Plans	0	3	1	None
7	GEC	4	Purposive Communication	3	0	3	None
8	PE	2	PE 2	2	0	2	None
9	NSTP	2	NSTP 2	3	0	3	None
10	WOED	2	Work Education 2	2	0	2	None
				<b>21</b>	<b>12</b>	<b>25</b>	<b>33-Contact Hours/Wk</b>

<b>2nd Year - First Semester</b>							
No.	Course Number		Course Title	Number of Hours		Units	Prerequisite/ (Co-requisite)
				Lecture	Laboratory		
1	MATH	271	Differential Equation	3	0	3	MATH 211
2	CADR	211	Computer Aided Drafting	0	3	1	None
3	CEBS	211	Statics of Rigid Bodies	4	0	4	PHSC 112/MATH 211
4	CEPL	211	Fundamentals of Surveying	3	3	4	MATH 121, CEDR 112
5	CEBS	221	Engineering Economy	3	0	3	2nd Year Standing
6	MATH	281	Engineering Data Analysis	3	0	3	None
7	GEC	6	Science Technology and Society	3	0	3	None
8	PE	3	PE 3	2	0	2	None
				<b>21</b>	<b>6</b>	<b>23</b>	<b>27-Contact Hours/Wk</b>

<b>2nd Year - Second Semester</b>							
No.	Course Number		Course Title	Number of Hours		Units	Prerequisite/ (Co-requisite)
				Lecture	Laboratory		
1	MATH	292	Numerical Solutions to CE Problems	2	3	3	MATH 271
2	CEBS	222	Dynamics of Rigid Bodies	3	0	3	CEBS 211
3	CEBS	232	Mechanics of Deformable Bodies	4	0	4	CEBS 211
4	CEBS	242	Engineering Management	2	0	2	2nd Year Standing
5	CEPC	232	Construction Estimate	2	3	3	MATH 152
6	GEC	9	Life and Works of Rizal	3	0	3	None
7	GEC	5	Art Appreciation	3	0	3	None
8	PEDU	252	PE 4	2	0	2	None
9	WOED	3	Work Education 3	2	0	2	None
				<b>23</b>	<b>6</b>	<b>25</b>	<b>29-Contact Hours/Wk</b>

2nd Year - Summer							
No.	Course Number		Course Title	Number of Hours		Units	Prerequisite/ (Co-requisite)
				Laboratory			
1	CEPR	200	OJT 1 - Horizontal Construction Management (200 hrs)	1	3	2	2nd Year Standing

3rd Year - First Semester							
No.	Course Number		Course Title	Number of Hours		Units	Prerequisite/ (Co-requisite)
				Lecture	Laboratory		
1	CEST	321	Structural Theory	3	3	4	CEBS 232
2	CEHR	331	Highway and Railroad Engineering	3	0	3	CEPL 211
3	EUTL	311	Engineering Utilities 1	3	0	3	PHSC 112
4	EUTL	321	Engineering Utilities 2	3	0	3	PHSC 112
5	CEPC	341	Construction Materials and Testing	2	3	3	CEBS 232
6	GEC	2	Readings in Philippine History	3	0	3	None
7	GEC	7	Ethics	3	0	3	None
8	GEC	10	Environmental Science	3	0	3	None
9	RLG	1	Life and Teachings of Jesus	3	0	3	None
				26	6	28	32-Contact Hours/Wk

3rd Year - Second Semester							
No.	Course Number		Course Title	Number of Hours		Units	Prerequisite/ (Co-requisite)
				Lecture	Laboratory		
1	CEBS	352	Technopreneurship 101	3	0	3	3rd Year Standing
2	CEPC	352	Building System Design	2	3	3	CEDR 112
3	CEPC	362	Principles of Steel Design	3	3	4	CEST 321
4	CEPC	372	Principles of Reinforce/Prestressed Concrete	3	3	4	CEST 321
5	CEPD	312	Hydrology	2	0	2	3rd Year Standing
6	CEPD	322	Hydraulics	4	3	5	3rd Year Standing
7	GECE	312	Geology for Civil Engineers	2	0	2	CHEM 111
8	RLG	2	Denominational History	3	0	3	None
9	GEC	9	Contemporary World	3	0	3	None
				25	12	29	37-Contact Hours/Wk

3rd Year - Summer							
No.	Course Number		Course Title	Number of Hours		Units	Prerequisite/ (Co-requisite)
				Laboratory			
1	CEPR	300	OJT 2 - Vertical Construction Management (200 hrs)	1	3	2	Third Year Standing

4th Year - First Semester							
No.	Course Number		Course Title	Number of Hours		Units	Prerequisite/ (Co-requisite)
				Lecture	Laboratory		
1	CEGE	411	Geotechnical Engineering 1 (Soil Mechanics)	3	3	4	GECE 312, CEBS 232
2	CETE	481	Principles of Transportation Engineering	3	0	3	CEHR 331
3	CEPE	431	CE Project 1	1	3	2	4th Year Standing
4	CEPS	411	Professional Course - Specialized 1	3	0	3	4th Year Standing
5	CEPS	421	Professional Course - Specialized 2	3	0	3	4th Year Standing
6	CEPC	481	CE Law, Ethics and Contracts	2	0	2	4th Year Standing
7	RLG	3	Christian Beliefs with Spiritual Gifts	3	0	3	None
				18	6	20	24-Contact Hours/Wk

4th Year - Second Semester							
No.	Course Number		Course Title	Number of Hours		Units	Prerequisite/ (Co-requisite)
				Lecture	Laboratory		
1	CEPL	422	CE Project 2	1	3	2	CEPE 431
2	CEPC	422	Quantity Surveying	1	3	2	CEPC 352
3	CEPS	432	Professional Course - Specialized 3	3	0	3	4th Year Standing
4	CEPS	442	Professional Course - Specialized 4	3	0	3	4th Year Standing
5	CEPS	452	Professional Course - Specialized 5	3	0	3	4th Year Standing
6	CEPC	492	Construction Methods and Project Management	3	0	3	4th Year Standing
7	RLG	4	Daniel and Revelation	3	0	3	None
				17	6	19	23-Contact Hours/Wk
Total				181	63	202	