



University of Southeastern Philippines
College of Engineering

BACHELOR OF SCIENCE CIVIL ENGINEERING - Transportation Engineering

CMO 92 series of 2017

Approved per BOR Resolution No. 58 Series of 2018

Revised per BOR Resolution No. 75 Series of 2019

Effective S.Y. 2018-2019

FIRST YEAR											
Course No.	Course Title	Credit			Pre/Co-Requirement	Course No.	Course Title	Credit			Pre/Co-Requirement
		Lec	Lab	Total Units Credit				Lec	Lab	Total Units Credit	
GE 111	Purposive Communication	3	0	3	None	GE 113	Understanding the Self	3	0	3	None
GE 112	Mathematics in the Modern World	3	0	3	None	GE 114	Ethics	3	0	3	None
GE 215	The Life and Works of Rizal	3	0	3	None	GE 217	Science, Technology and Society	3	0	3	None
Math 111	Engineering Calculus 1	3	0	4	None	Math 121	Engineering Calculus 2	3	0	3	Math 111
Nat Sci 1	Chemistry for Engineers	3	1	4	None	Nat Sci 2	Physics for Engineers	3	1	4	Nat Sci 1, Math 111
BES 101	Engineering Drawing and Plans	0	1	1	None	BES 102	Computer Aided Drafting	2	0	2	BES 101
CEC 111	Civil Engineering Orientation	2	0	2	None	Nat Sci 3	Engineering Geology	2	0	2	Nat Sci 1
PE 111	Movement Enhancement	2	0	2	None	PE 122	Fitness Exercise	2	0	2	None
NSTP 111	National Service Training Program 1	3	0	3	None	NSTP 122	National Service Training Program 2	3	0	3	None
Total				24		Total				24	

OFF SEMESTER 1 (refer below for ***OFF SEMESTER COURSES***)

SECOND YEAR											
Course No.	Course Title	Credit			Pre/Co-Requirement	Course No.	Course Title	Credit			Pre/Co-Requirement
		Lec	Lab	Total Units Credit				Lec	Lab	Total Units Credit	
GE 216	Readings in the Philippine History	3	0	3	None	GE 218	Arts Appreciation	3	0	3	None
EGE 311	General Education Elective 1	3	0	3	None	Math 311	Numerical Solutions to CE Problems	2	1	3	Math 211
GE 319	The Contemporary World	3	0	3	None	EGE 312	General Education Elective 2	3	0	3	None
Math 211	Differential Equations	3	0	3	Math 121	BES 105	Mechanics of Deformable Bodies	4	0	4	BES 115
Math 212	Engineering Data Analysis	3	0	3	Math 121	BES 107	Methods of Research	3	0	3	Math 212, GE 111
BES 115	Mechanics of Rigid Bodies	5	0	5	Math 121, Nat Sci 2	CEC 221	Fundamentals of Surveying	3	0	3	Math 121, Nat Sci 2
BES 106	Engineering Economics	3	0	3	Math 121	CEC 221F	Fundamentals of Surveying, Field	0	2	2	Math 121, Nat Sci 2
PE 213	Physical Activities Towards Health & Fitness I	2	0	2	None	CEC 222	Building System Design	2	1	3	BES 115, BES 102
Total				25		Total				26	

OFF SEMESTER 2 (refer below for ***OFF SEMESTER COURSES***)

THIRD YEAR											
Course No.	Course Title	Credit			Pre/Co-Requirement	Course No.	Course Title	Credit			Pre/Co-Requirement
		Lec	Lab	Total Units Credit				Lec	Lab	Total Units Credit	
EGE 313	General Education Elective 3	3	0	3	None	CEC 321	Highway and Railroad Engineering	3	0	3	CEC 312
BES 109	Engineering Management	3	0	3	Math 212	CEC 322	Construction Materials and Testing, lecture	2	0	2	BES 105
CEC 311	Structural Theory	3	1	4	BES 105	CEC 322L	Construction Materials and Testing, lab	0	1	1	BES 105
CEC 312	Principle of Transportation Engineering	3	0	3	CE 221	CEC 323	Principle of Steel & Timber Design	3	1	4	CEC 311
CEC 313	Geotechnical Engineering, Lecture	3	0	3	BES 105	CEC 324	Principle of Reinforced / Pre-stressed Concrete	3	1	4	CEC 311
CEC 313L	Geotechnical Engineering, Lab	0	1	1	BES 105	CEC 325	Hydrology	2	0	2	BES 105
CEC 314	Quantity Surveying	1	1	2	CEC 222	CEC 326	Construction Methods and Project Management	2	1	3	BES 109
CEC 315	Hydraulics, lecture	4	0	4	BES 105	CEC 327	CE Laws, Ethics and Contracts	2	0	2	BES 109
CEC 315L	Hydraulics, lab	0	1	1	BES 105	BES 110	Technopreneurship	3	0	3	BES 109
Total				24		Total				24	

OFF SEMESTER 3 (refer below for ***OFF SEMESTER COURSES***)

FOURTH YEAR											
Course No.	Course Title	Credit			Pre/Co-Requirement	Course No.	Course Title	Credit			Pre/Co-Requirement
		Lec	Lab	Total Units Credit				Lec	Lab	Total Units Credit	
CEC 400	CE Project (Specialization Project, Thesis)*	0	3	3		CEC 400	CE Project (Specialization Project, Thesis)*	0	3	3	All prior Subjects Completed
CE IC 4	Field trip and Seminars	0	1	1		CE Elective	Correlation Course	0	2	2	
CE_43	Professional Course – Specialized 1	3	0	3		CEC 401	Specialized On-the-Job Training (320 hrs)	0	2	2	
CE_43	Professional Course – Specialized 2	3	0	3		ELEC 1	FREE ELECTIVE	0	1	1	
CE_43	Professional Course – Specialized 3	3	0	3		Total				8	
CE_43	Professional Course – Specialized 4	3	0	3							
CE_43	Professional Course – Specialized 5	3	0	3							
Total				19							

*** OFF SEMESTER COURSES ***

OFF SEMESTER 1					
Course No.	Course Title	Credit			Pre/Co-Requirement
		Lec	Lab	Total Units Credit	
BES 103	Computer Fundamentals and Programming	1	2	3	None
Total				3	
OFF SEMESTER 2					
ALE 221	Engineering Utilities 1	3	0	3	Nat Sci 2
ALE 222	Engineering Utilities 2	3	0	3	Nat Sci 2
Total				6	

OFF SEMESTER 3					
Course No.	Course Title	Credit			Pre/Co-Requirement
		Lec	Lab	Total Units Credit	
CE IC 1	Basic Driving and Automotive	0	1	1	CEC 312
CE IC 2	Scaffold Erection	0	1	1	CEC 323, CEC 324
CE IC 3	Disaster Risk Management	0	1	1	ALE 222
Total				3	

Note: *-A subject to be enrolled continuously until the last prescribed semester where student's grade will appear

SPECIALIZATION COURSES FOR TRANSPORTATION ENGINEERING TRACK

- | | |
|---|---|
| Road Maintenance Management | Public Transport Management |
| Transport Economics / Project Appraisal | Traffic Engineering Analysis and Management |
| Transportation Systems Planning and Design | Non-Motorized transport / Road Safety |
| Computer Software in Transportation Engineering | |

SUGGESTED GE ELECTIVES

Course No.	Course Title	Lec	Lab	Total Units Credit	Pre/Co-Requirement
	People and the Earth's Ecosystem	3	0	3	None
	The Entrepreneurial Mind	3	0	3	None
	Living in the IT Era	3	0	3	None
	Gender and Society	3	0	3	None
	Popular Literature	3	0	3	None
	Foreign Language	3	0	3	None
	Transpersonal Psychology	3	0	3	None

Summary

Mathematics, Natural / Physical Sciences	25
Basic Engineering Sciences	28
Allied Courses	6
Professional Courses – Common	55
Professional Courses – Specialized	15
On the Job Training (320 Hours)	3
General Education Courses	33
Mandated Course	3
Physical Education	6
National Service Training Program	6
Institutional Courses	4
Total number of units	186