



JOSE MARIA COLLEGE
Philippine-Japan Friendship Highway, Sasa, Davao City

COLLEGE OF ENGINEERING EDUCATION
Bachelor of Science in Civil Engineering Major in Structural Engineering

(Based on CMO 92, Series 2017)
Effective AY 2020 - 2021

FIRST YEAR

FIRST SEMESTER				SECOND SEMESTER							
Code	Pre-req	Description	Lec	Lab	Unit	Code	Pre-req	Description	Lec	Lab	Unit
GE 2	None	Mathematics in Modern World	3	0	3	GE 4	None	Readings in Philippine History	3	0	3
GE 5	None	Contemporary World	3	0	3	GE 3	None	Purposive Communication	3	0	3
GE 9	None	Life and Work of Rizal	3	0	3	GE 7	None	Science, Technology, and Society	3	0	3
Math 111	None	Calculus 1 (Differential Calculus)	3	0	3	Math 121	Math 111	Calculus 2 (Integral Calculus)	3	0	3
NatSci 111	None	Chemistry for Engineers	3	1	4	NatSci 121	Math 111	Physics for Engineers (Calculus Based)	3	1	4
BES 111	None	Civil Engineering Orientation	2	0	2	BES 121	GE 2	Engineering Drawing and Plans	0	1	1
PE 1	None	Physical Education 1	-	-	2	PE 2	PE 1	Physical Education 2	-	-	2
NSTP 1	None	CMT 1/ CWTS 1	-	-	3	NSTP 2	NSTP 1	CMT 2/ CWTS 2	-	-	3
SF 1	None	Student Formation 1	-	-	1	SF 2	SF 1	Student Formation 2	-	-	1
TOTAL			<u>24</u>			TOTAL			<u>23</u>		

SUMMER					
Code	Pre-req	Description	Lec	Lab	Unit
GE 1	None	Understanding the Self	3	0	3
GE 6	None	Arts Appreciation	3	0	3
GE 8	None	Ethics	3	0	3
TOTAL			<u>9</u>		

SECOND YEAR

FIRST SEMESTER				SECOND SEMESTER							
Code	Pre-req	Description	Lec	Lab	Unit	Code	Pre-req	Description	Lec	Lab	Unit
GE 11	None	Entrepreneurial Mind	3	0	3	GE 10	None	Environmental Science	3	0	3
GE 12	None	Great Books	3	0	3	Math 221	GE 2	Engineering Data Analysis	3	0	3
Math 211	Math 121	Differential Equations	3	0	3	NatSci 221	NatSci 111	Geology for Civil Engineers	2	0	2
BES 211	None	Computer Fundamentals & Programming	0	2	2	BES 221	BES 212	Dynamics of Rigid Bodies	2	0	2
BES 212	Bes 121	Computer Aided Drafting	0	1	1	BES 222	BES 212	Mechanics of Deformable Bodies	4	0	4
BES 213	Math 121	Statics of Rigid Bodies	3	0	3	BES 223	2nd Yr Standing	Engineering Economics	3	0	3
CEC 211	121	Fundamentals of Surveying	3	1	4	CEC 221	3rd Yr Standing	Construction Materials and Testing	2	1	3
PE 3	PE 2	Physical Education 3	-	-	2	PE 4	PE 3	Physical Education 4	-	-	2
SF 3	SF 1	Student Formation 3	-	-	1	SF 4	SF 1	Student Formation 4	-	-	1
TOTAL			<u>22</u>			TOTAL			<u>23</u>		

SUMMER					
Code	Pre-req	Description	Lec	Lab	Unit
ACE 311	NatSci 121	Engineering Utilities 1	3	0	3
ACE 312	NatSci 121	Engineering Utilities 2	3	0	3
BES 224	BES 223	Engineering Management	3	0	3
TOTAL			<u>9</u>		

THIRD YEAR

FIRST SEMESTER				SECOND SEMESTER							
Code	Pre-req	Description	Lec	Lab	Unit	Code	Pre-req	Description	Lec	Lab	Unit
Math 311	BES 122, Math 211	Numerical Solutions to CE Problems	2	1	3	BES 321	3rd Yr Standing	Technopreneurship	3	0	3
CEC 311	BES 222	Structural Theory	3	1	4	CEC 321	CEC 312	Principles of Transportation Engineering	3	0	3
CEC 312	CEC 211	Highway and Railroad Engineering	3	0	3	CEC 322	CEC 311	Principles of Steel Design	3	1	4
CEC 313	BES 121	Building Systems Design	2	1	3	CEC 323	CEC 311	Principles of Reinforced/ Prestressed Concrete	3	1	4
CEC 411	BES 222, NatSci 221	Geotechnical Engineering 1 (Soil Mechanics)	3	1	4	CEC 324	CEC 315	Hydrology	2	0	2
CEC 315	BES 222	Hydraulics	4	1	5	CEC 325	CEC 313	Construction Methods and Project Management	3	0	3
SF 5	SF 1	Student Formation 5	-	-	1	CEC 326	Math 221	CE Project 1 (Research Methods)	3	0	3
TOTAL			<u>23</u>			TOTAL			<u>23</u>		

SUMMER					
Code	Pre-req	Description	Lec	Lab	Unit
OJT for CE	CEC 321, CEC 323	On-the-Job Training (240 hours)	3	0	3

REGIONAL OFFICE XI
DAVAO CITY

CONTENTS NOTED:

MARIA CHRISTINA B. CONDEZ
EDUCATION SUPERVISOR II

DATE

FOURTH YEAR

FIRST SEMESTER				SECOND SEMESTER							
Code	Pre-req	Description	Lec	Lab	Unit	Code	Pre-req	Description	Lec	Lab	Unit
CEC 314	3rd Yr Standing	CE Laws, Ethics and Contracts	3	0	3	CES 421S	4th Yr Standing	Computer Software in Structural Analysis	3	0	3
CEC 412	CEC 313	Quantity Surveying	1	1	2	Corre 421	4th Yr Standing	CE Correlation Course (Mathematics)	5	0	5
CEC 421	CEC 326	CE Project 2 (Specialization Project)	2	1	3	Corre 422	4th Yr Standing	CE Correlation Course (Hydraulics & Geotechnics)	3	0	3
CES 411S	4th Yr Standing	Earthquake Engineering	3	0	3	Corre 423	4th Yr Standing	CE Correlation Course (Design)	4	0	4
CES 413S	4th Yr Standing	Bridge Engineering	3	0	3	TOTAL			<u>15</u>		
CES 412S	4th Yr Standing	Foundation & Retaining Wall Design	3	0	3	TOTAL			<u>17</u>		

ENGR. ROLDAN G. SUAZO
CEE Dean

JOSEFINA D. ORTEGA, MAEd
Vice President, Academic Affairs

DR. JOSE MARIA S.E. GONZALES
School Resident