



University of Southeastern Philippines
College of Engineering

BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING

CMO 97 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-Requisite
		Lec	Lab	Total Units Credit	
GE 111	Purposive Communication	3	0	3	None
GE 112	Mathematics in the Modern World	3	0	3	None
GE 113	Understanding the Self	3	0	3	None
Math 111	Engineering Calculus 1	3	0	3	None
Nat Sci 1L	Chemistry for Engineers	3	1	4	None
ME 111	Orientation to Mechanical Engineering	2	0	2	None
BES 101	Engineering Drawing and Plans	0	1	1	None
PE 111	Movement Enhancement	2	0	2	None
NSTP 111	National Service Training Program 1	3	0	3	None
Total				24	

SECOND YEAR					
Course No.	Course Title	Credit			Pre/Co-Requisite
		Lec	Lab	Total Units Credit	
GE 215	The Life and Works of Jose Rizal	3	0	3	None
GE 216	Readings in Philippine History	3	0	3	None
Math 211	Differential Equations	3	0	3	Math 121
Math 212	Engineering Data Analysis	3	0	3	Math 121
ME 211	Thermodynamics 1	3	0	3	Math121& NatSci 2L
ME 212L	Workshop Theory and Practice	0	1	1	ME 111
AME 1	Basic Electrical Engineering	2	0	2	Math121& NatSci 2L
AME 1L	Basic Electrical Engineering Laboratory	0	1	1	Co-req: AME 1
BES 115	Mechanics of Rigid Bodies	5	0	5	Math111 & NatSci 2L
PE 213	Physical Activities Towards Health & Fitness I	2	0	2	PE 122
Total				26	

THIRD YEAR					
Course No.	Course Title	Credit			Pre/Co-Requisite
		Lec	Lab	Total Units Credit	
EGE 311	General Education Elective 1	3	0	3	None
ME 311	Fluid Mechanics	3	0	3	BES 108
ME 312L	Mechanical Engineering Laboratory 1	0	1	1	ME 221
ME 313	Refrigeration Systems	3	0	3	ME 224
ME 314	Combustion Engineering	2	0	2	ME 221
ME 315L	Computer Applications for ME	0	1	1	BES 103
AME 2	Basic Electronics Engineering	2	0	2	AME 1 & AME 1L
AME 2L	Basic Electronics Engineering Laboratory	0	1	1	Co-req: AME 2
BES 108	Engineering Economics	3	0	3	Math 121
BES 111	Materials Science and Engineering for ME	2	0	2	NatSci 1L&BES 105
BES 111L	Material Science and Engineering Laboratory	0	1	1	Co-req: BES 111
Total				22	

Off - Semester					
Course No.	Course Title	Credit			Pre/Co-Requisite
		Lec	Lab	Total Units Credit	
GE 319	Contemporary World	3	0	3	None
EGE 313	General Education Elective 3	3	0	3	None
BES 113	Basic Occupational Health and Safety	3	0	3	ME 312L
Total				9	

FOURTH YEAR					
Course No.	Course Title	Credit			Pre/Co-Requisite
		Lec	Lab	Total Units Credit	
ME 400*	ME Capstone Project	0	3	3	Completed all Prior Courses
ME 411	Machine Design 2	2	0	2	ME 322
ME 411L	Machine Design 2 Laboratory	0	1	1	Co-req: ME 411
ME 412	Industrial Plant Engineering	3	0	3	ME 325, Co-req: ME 414
ME 412L	Industrial Plant Engineering Laboratory	0	1	1	Co-req: ME 412
ME 413L	Mechanical Engineering Laboratory 3	0	2	2	ME321, ME 321L, ME324L, ME325
ME 414	Industrial Processes with Plant Visits and Seminars	0	2	2	Co-req: ME 412
ME 415	ME Laws, Ethics, Contracts, Codes and Standards	2	0	2	GE 114
ME 416	Vibration Engineering	2	0	2	Math 211
ME EL 1	ME Elective 1 (Correlation Course 1)	0	2	2	Completed all Prior Courses
BES 109	Engineering Management	2	0	2	Math 212
BES 110	Technopreneurship	3	0	3	BES 106, co-req BES 109
Total				25	

SUGGESTED ME ELECTIVE 3			
Application of mechanical engineering to Rail systems	Computers and Computational Science		
Automotive Engineering	Energy Engineering and Management		
Basic Surveying	Heating, Ventilating, Air-Conditioning and		
Biomechanics	Manufacturing Engineering		

SUGGESTED GE ELECTIVES				
Foreign Language	3	0	3	None
Gender and Society	3	0	3	None
Living in the IT Era	3	0	3	None
People and the Earth's Ecosystem	3	0	3	None
Popular Literature	3	0	3	None
The Entrepreneurial Mind	3	0	3	None
Transpersonal Psychology	3	0	3	None

SUMMARY	
TECHNICAL COURSES	
Mathematics	12
Natural / Physical Sciences	8
Basic Engineering Sciences	22
Allied Mechanical Engineering Courses	9
Fundamental Mechanical Engineering Courses	55
Professional Mechanical Engineering Courses	24
Mechanical Engineering Electives	5
NON-TECHNICAL COURSES	
General Education Courses	33
Mandated Course	3
Physical Education	8
National Service Training Program	6
Total number of units	185

