

Name: _____



ANDRES BONIFACIO COLLEGE, INC.
College Park, Dipolog City
SCHOOL OF ENGINEERING



BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING
EFFECTIVE AY 2023 - 2024

FIRST YEAR

Grade	Course No.	Description	Lec hrs per week	Lab hrs per week	Total unit	Pre-requisite
FIRST SEMESTER						
_____	EM 11	Calculus 1	5	0	5	
_____	ER 11	Special Enhancement Course for Engineering	3	0	3	
_____	ES 11	Engineering Drawing and Plans	0	3	1	
_____	Chem 111	Chemistry for Engineers	3	3	4	
_____	ME 11	Mechanical Engineering Orientation	1	0	1	
_____	GEC 111	Understanding the Self	3	0	3	
_____	GEC 123	Purposive Communication	3	0	3	
_____	GEC 211	Mathematics in the Modern World	3	0	3	
_____	PATHFiT 1	Movement Competency Training	2	0	2	
_____	NSTP 111	National Service Training Program I	(3)	0	(3)	
			23	6	25	
SECOND SEMESTER						
_____	EM 16	Calculus 2	5	0	5	EM11,ER11
_____	ES 16	Computer-Aided Drafting	0	3	1	ES11,ER11
_____	Phy 121	Physics for Engineers	3	3	4	EM11,ER11
_____	GEC 115	Gender and Society	3	0	3	
_____	GEC 122	Art Appreciation	3	0	3	
_____	GEC 113	The 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 I	(3)	0	(3)	NSTP111
			22	6	24	

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	2 nd year standing
_____	ME 21	Thermodynamics I	3	0	3	Phy121, EM16
_____	ME 22	Workshop Theory and Practice	0	3	1	2 nd year standing
_____	EE 21	Electrical Circuits 1	3	3	4	Phy121, EM16
_____	GEC 112	Readings in Philippine History	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	PATHFiT 2
			24	9	27	
SECOND SEMESTER						
_____	EM 26	Advanced Engineering Mathematics	3	3	4	EM21
_____	ES 26	Dynamics of Rigid Bodies	3	0	3	EM21
_____	ES 27	Mechanics of Deformable Bodies	4	0	4	Co-requisite ES26
_____	ME 26	Thermodynamics II	3	0	3	ME21
_____	ME 27	Machine Shop Theory	0	6	2	ME22
_____	ECE 28	Electronic Circuits, Devices, and Analysis	3	3	4	EE21
_____	IC 111	Life and Works of Andres Bonifacio	2	0	2	
_____	MST 122	Living in the IT Era	3	0	3	
_____	PATHFiT 4	Dance/ Sports/ Martial Arts/ Group Exercise/ Outdoor and Adventure Activities	2	0	2	PATHFiT 3
			23	12	27	

THIRD YEAR

FIRST SEMESTER							
	ES	31	Engineering Economics	3	0	3	3rd year standing
	ES	32	Mechanics of Fluids	3	0	3	ME26
	ES	33	Materials Science & Engineering	3	0	3	ES27, Chem111
	ES	42	Environmental Science and Engineering	3	0	3	
	EE	33	DC and AC Machinery	2	3	3	EE21
	ME	31	Heat Transfer	2	0	2	ME26
	ME	32	Machine Elements	2	3	3	ES26
	ME	33	Vibration Engineering	2	0	2	EM21
	ME	34	Computer Applications for ME	0	3	1	ES22
	LIT	311	Philippine Literature	3	0	3	
				23	9	26	
SECOND SEMESTER							
	ES	39	Basic Occupational Safety and Health	3	0	3	3rd year standing
	ES	37	Methods of Research	3	0	3	EM22
	ES	36	Engineering Management	3	0	3	ES31
	ME	35	Mechanical Engineering Laboratory 1	0	3	1	ME26
	ME	36	Combustion Engineering	2	0	2	ME26
	ME	37	Refrigeration Systems	3	0	3	ME26, ME31
	ME	38	Fluid Machineries	3	0	3	ES32
	ME	Elec1	ME Elective 1	2	0	2	ME26
	GEC	124	Science, Technology and Society	3	0	3	
				22	3	23	
SUMMER							
	OJT	1	On-the-Job Training (240 hours)	(2 units)	(1 unit)	3	4 th year standing

FOURTH YEAR

FIRST SEMESTER							
	ES	41	Technopreneurship 101	3	0	3	4th year standing
	ER	41	Engineering Review 1	3	0	3	4th year standing
	ME	41	Mechanical Engineering Laboratory 2	0	6	2	ME35
	ME	42	Air-conditioning and Ventilation Systems	3	0	3	ME37
	ME	43	Power Plant Design with Renewable Energy	3	3	4	ME36, ME31
	ME	44	Machine Design 1	3	0	3	ES27, ME32
	ME	45	Control Engineering	2	3	3	ECE28
	Proj	1	Project Study 1	1	3	2	4th year standing
	ME	Elec2	ME Elective 2	2	0	2	MEElec1
				20	15	25	
SECOND SEMESTER							
	ER	46	Engineering Review 2	3	0	3	4th year standing
	ME	46	Mechanical Engineering Laboratory 3	0	6	2	ME41
	ME	47	Industrial Plant Engineering	3	3	4	ME42, ME43
	ME	48	Manufacturing and Industrial Processes with Plant Visit	1	3	2	Co-Req ME47
	ME	49	Machine Design 2	2	3	3	ME44
	ME	50	ME Laws, Ethics, Contracts, Codes and Standards	3	0	3	GEC121
	GEC	121	Ethics	3	0	3	4th year standing
	Proj	2	Project Study 2	1	3	2	Proj1
				16	18	25	

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	12	16
B. Natural Physical Science	8	8
C. Basic Engineering Sciences	19	23
D. Allied Courses	9	14
E. Fundamental Courses	50	53
F. Professional Courses	20	23
G. Technical Electives	4	4
Sub-total	122	144
II.NON-TECHNICAL COURSES		
A. General Education Courses	24	24
B. General Education Elective Courses/Mandated Courses	12	12
C. Institutional Courses		17
D. PE and NSTP	14	14
Sub-total	50	64
GRAND TOTAL	172	208

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.	Funda mental	Elec .	Gen. Educ.	GEC Elec/ Mandated	Insti tutio nal	PE and NSTP
SECOND SEMESTER												
EM26	Advanced Engineering Mathematics						4					
ES26	Dynamics of Rigid Bodies			3								
ES27	Mechanics of Deformable Bodies			4								
ME26	Thermodynamics II						3					
ME27	Machine Shop Theory						2					
ECE28	Electronic Circuits, Devices, and Analysis (Basic Electronics)				4							
IC111	Life and Works of Andres Bonifacio										2	
MST122	Living in the IT Era									3		
PATHFit4	Dance/ Sports/ Martial Arts/ Group Exercise/ Outdoor and Adventure Activities											2
THIRD YEAR												
FIRST SEMESTER												
ES31	Engineering Economics			3								
ES32	Mechanics of Fluids (Fluid Mechanics)						3					
ES38	Materials Science and Engineering						3					
ES42	Environmental Science and Engineering										3	
EE33	DC and AC Machinery				3							
ME31	Heat Transfer						2					
ME32	Machine Elements						3					
ME33	Vibration Engineering						2					
ME34	Computer Applications for ME						1					
LIT311	Philippine Literature										3	
SECOND SEMESTER												
ES39	Basic Occupational Safety and Health						3					
ES37	Methods of Research						3					
ES36	Engineering Management			3								
ME35	Mechanical Engineering Laboratory 1						1					
ME36	Combustion Engineering						2					
ME37	Refrigeration Systems						3					
ME38	Fluid Machineries						3					
MEElec1	ME Elective 1							2				
GEC124	Science, Technology and Society								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.	Funda mental	Elec .	Gen. Educ.	GEC Elec/ Mandated	Insti tutional	PE and NSTP
<u>FOURTH YEAR</u>												
FIRST SEMESTER												
ES41	Technopreneurship 101			3								
ER41	Engineering Review 1										3	
ME41	Mechanical Engineering Laboratory 2						2					
ME42	Air-conditioning and Ventilation Systems						3					
ME43	Power Plant Design with Renewable Energy					4						
ME44	Machine Design 1					3						
ME45	Control Engineering						3					
Proj1	Project Study 1					2						
MEElec2	ME Elective 2							2				
SECOND SEMESTER												
ER46	Engineering Review 2										3	
ME46	Mechanical Engineering Laboratory 3					2						
ME47	Industrial Plant Engineering					4						
ME48	Manufacturing and Industrial Processes with Plant Visit						2					
ME49	Machine Design 2					3						
ME50	ME Laws, Ethics, Contracts , Codes and Standards					3						
GEC121	Ethics								3			
Proj2	Project Study 2					2						
Total Units		16	8	23	14	23	53	4	24	12	17	14
<i>Nothing Follows</i>												