

Name: _____



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



BACHELOR OF SCIENCE IN ELECTRONICS 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	
_____	ES 11	Engineering Drawing and Plans	0	3	1	
_____	ES 22	Computer Programming 1	1	3	2	
_____	Chem 111	Chemistry for Engineers	3	3	4	
_____	ER 11	Special Enhancement Course for Engineering	3	0	3	
_____	GEC 112	Readings in Philippine History	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	<u>(3)</u>	<u>0</u>	<u>(3)</u>	
			20	9	23	

SECOND SEMESTER						
_____	EM 16	Calculus 2	5	0	5	EM11, ER11
_____	Phy 121	Physics for Engineers	3	3	4	EM11, ER11
_____	ES 16	Computer-Aided Drafting	0	3	1	ES11, ER11
_____	ES 28	Computer Programming 2	0	3	1	ES22
_____	GEC 122	Art Appreciation	3	0	3	
_____	GEC 124	Science, Technology and Society	3	0	3	
_____	Rizal 121	Rizal's Life, Works, and Writings	3	0	3	
_____	GEC 115	Gender and Society	3	0	3	
_____	PATHFit 2	Exercise-based Fitness Activities	2	0	2	PATHFit1
_____	NSTP 121	National Service Training Program I	<u>(3)</u>	<u>0</u>	<u>(3)</u>	NSTP111
			22	9	25	

SECOND YEAR

FIRST SEMESTER						
_____	EM 21	Differential Equations	3	0	3	EM16
_____	EM 22	Engineering Data Analysis	3	0	3	EM16
_____	ES 33	Materials Science and Engineering	3	0	3	Chem111
_____	ECE 22	Physics for ECE (Physics 2)	3	3	4	Phy121
_____	EE 21	Electrical Circuits 1	3	3	4	EM16,Phy121
_____	LIT 311	Philippine Literature	3	0	3	
_____	GEC 123	Purposive Communication	3	0	3	
_____	PATHFit 3	Dance/ Sports/ Martial Arts/ Group Exercise/ Outdoor and Adventure Activities	<u>2</u>	<u>0</u>	<u>2</u>	PATHFit 2
			23	6	25	

SECOND SEMESTER						
_____	EM 26	Advanced Engineering Mathematics	3	3	4	EM22
_____	ECE 26	Electromagnetics	4	0	4	EM21, ECE22
_____	ECE 27	Electronic Devices and	3	3	4	Co-req. EE26
_____	EE 26	Electrical Circuits 2	3	3	4	EE21
_____	MST 122	Living in the IT Era	3	0	3	
_____	GEC 113	The Contemporary World	3	0	3	
_____	PATHFit 4	Dance/ Sports/ Martial Arts/ Group Exercise/ Outdoor and Adventure Activities	<u>2</u>	<u>0</u>	<u>2</u>	PATHFit3
			21	9	24	

THIRD YEAR

FIRST SEMESTER							
_____	ES	31	Engineering Economics	3	0	3	3rd Yr. Standing
_____	ECE	31	Electronic Circuit Analysis and Design	3	3	4	ECE27
_____	ECE	32	Logic Circuits and Switching Theory	3	3	4	ECE27
_____	ECE	33	Principles of Communication Systems	3	3	4	ECE26, ECE27
_____	ECE	Elec1	Elective Course 1	3	3	4	ECE26, ECE27
_____	GEC	111	Understanding the Self	3	0	3	
_____	SSP	123	Indigenous People's Studies with Peace Education	<u>3</u>	<u>0</u>	<u>3</u>	
				21	12	25	
SECOND SEMESTER							
_____	ES	36	Engineering Management	3	0	3	ES 31
_____	ES	37	Methods of Research	3	0	3	3rd Yr. Standing
_____	ES	39	Basic Occupational Safety and Health	3	0	3	3rd Yr. Standing
_____	ECE	36	Data Communications	3	3	4	ECE33
_____	ECE	37	Modulation and Coding Techniques	3	3	4	ECE32, ECE33
_____	ECE	38	Feedback and Control Systems	3	3	4	EM26, ECE27
_____	ECE	39	Microprocessor, Microcontroller Systems and Design	<u>3</u>	<u>3</u>	<u>4</u>	ECE31, ECE32
				21	12	25	
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 Yr. Standing
_____	ES	42	Environmental Science and Engineering	3	0	3	4th Yr. Standing
_____	ECE	41	Electronic Systems and Design	3	3	4	ECE31, ECE38
_____	ECE	42	Signals, Spectra and Signal Processing	3	3	4	ECE37, ECE38
_____	Proj	1	Project Study 1	1	3	2	4th Yr. Standing
_____	ECE	Elec2	Elective Course 2	3	3	4	ECEElec1
_____	ER	41	Engineering Review 1	<u>3</u>	<u>0</u>	<u>3</u>	4th Yr. Standing
				19	12	23	
SECOND SEMESTER							
_____	ES	48	Seminars, Colloquium and Field Trips	0	3	1	4th Yr. Standing
_____	ECE	Elec3	Elective Course 3	3	3	4	ECEElec2
_____	ECE	46	Transmission Media, Antenna System and Design	3	3	4	ECE38, ECE42
_____	ECE	47	ECE Laws, Contracts, Ethics, Standards and Safety	3	0	3	ECE41, ECE42
_____	Proj	2	Project Study 2	1	3	2	Proj1
_____	IC	111	Life and Works of Andres Bonifacio	2	0	2	
_____	GEC	121	Ethics	3	0	3	Co-Req. ECE47
_____	ER	46	Engineering Review 2	<u>3</u>	<u>0</u>	<u>3</u>	ER41
				18	12	22	

Elective Course Option 1: Telecommunications and Instrumentation Elective Course 1 - Advanced Communication Systems and Design Elective Course 2 - Advanced Networking Elective Course 3 - Advanced Instrumentation and Control Systems	Elective Course Option 2- Power Electronics and Control Elective Course 1 - Advanced Power Supply Systems Elective Course 2 - Renewable Energy Systems Elective Course 3 - Advanced Instrumentation and Control Systems
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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	9	11
D. Allied Courses	20	21
E. Professional Core Courses	61	66
F. Technical Electives	8	12
G. On-the-Job Training (240 hours)	3	3
Sub-total	121	140
II. NON-TECHNICAL COURSES		
A. General Education Courses	24	24
B. General Education Elective Courses/Mandated Courses	12	12
C. Institutional Courses		14
D. Physical Education	8	8
E. National Service Training Program	6	6
Sub-total	50	64
GRAND TOTAL	171	201

Evaluated by **ENGR. REY C. BASADRE**Dean

	Adventure Activities												
Course No.	Descriptive Title	Units											
		Math	Natural/P hysical Sci.	Basic Eng'g Sci.	Allied	Prof.	Technic al Elec.	OJT	Gen. Educ.	GEC Elec./ Mandated	Institutio nal	Physi cal Educ.	NSTP
SECOND SEMESTER													
EM26	Advanced Engineering Mathematics					4							
ECE26	Electromagnetics					4							
ECE27	Electronic Devices and Circuits (Electronics 1: Electronic Devices and Circuits)					4							
EE26	Electrical Circuits 2				4								
MST122	Living in the IT Era									3			
GEC113	The Contemporary World								3				
PATHFit4	Dance/ Sports/ Martial Arts/ Group Exercise/ Outdoor and Adventure Activities											2	
THIRD YEAR													
FIRST SEMESTER													
ES31	Engineering Economics			3									
ECE31	Electronic Circuit Analysis and Design (Electronics 2: Electronic Circuit Analysis and Design)					4							
ECE32	Logic Circuits and Switching Theory (Digital Electronics 1: Logic Circuits and Switching Theory)					4							
ECE33	Principles of Communication Systems Communications 1: Principles of Communication Systems)					4							
ECEElec1	Elective Course 1						4						
GEC111	Understanding the Self								3				
SSP123	Indigenous People's Studies with Peace Education									3			
SECOND SEMESTER													
ES36	Engineering Management			3									
ES37	Methods of Research					3							
ES39	Basic Occupational Safety and Health					3							
ECE36	Data Communications (Communications 3: Data Communications)					4							
ECE37	Modulation and Coding Techniques (Communications 3: Modulation and Coding Techniques)					4							

ECE38	Feedback and Control Systems					4							
ECE39	Microprocessor, Microcontroller Systems and Design (Digital Electronics 2: Microprocessor, Microcontroller Systems and Design)					4							
SUMMER													
OJT1	On-the-Job Training							3					
Course No.	Descriptive Title	Units											
		Math	Natural/Physical Sci.	Basic Eng'g Sci.	Allied	Prof.	Technical Elec.	OJT	Gen. Educ.	GEC Elec./Mandated	Institutional	Physical Educ.	NSTP
<u>FOURTH YEAR</u>													
FIRST SEMESTER													
ES41	Technopreneurship 101			3									
ES42	Environmental Science and Engineering				3								
ECE41	Electronic Systems and Design (Electronics 3: Electronic Systems and Design)					4							
ECE42	Signals, Spectra and Signal Processing					4							
Proj1	Project Study 1					2							
ECEElec2	Elective Course 2						4						
ER41	Engineering Review 1										3		
<u>SECOND SEMESTER</u>													
ES48	Seminars, Colloquium and Field Trips					1							
ECEElec3	Elective Course 3						4						
ECE46	Transmission Media, Antenna System and Design (Communications 4: Transmission Media, Antenna System and Design)					4							
ECE47	ECE Laws, Contracts, Ethics, Standards and Safety					3							
Proj2	Project Study 2					2							
IC 111	Life and Works of Andres Bonifacio										2		
GEC121	Ethics								3				
ER46	Engineering Review 2										3		
Total Units		16	8	10	21	63	12	3	24	12	18	8	6
Nothing Follows													