

Name: _____



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



BACHELOR OF SCIENCE IN COMPUTER 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						
_____	CpE 11	Computer Engineering as a Discipline	1	0	1	
_____	EM 11	Calculus 1	5	0	5	
_____	ES 11	Engineering Drawing and Plans	0	3	1	
_____	Chem 111	Chemistry for Engineers	3	3	4	
_____	ER 11	Special Enhancement Course for Engineering	3	0	3	
_____	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	<u>(3)</u>	<u>0</u>	<u>(3)</u>	
			23(3)	6	25(3)	
SECOND SEMESTER						
_____	EM 16	Calculus 2	5	0	5	EM11,ER11,GEC211
_____	Phy 121	Physics for Engineers	3	3	4	EM11,ER11,GEC211
_____	ES 16	Computer-Aided Drafting	0	3	1	ES11,ER11,GEC211
_____	CpE 16	Discrete Mathematics	3	0	3	EM11,ER11,GEC211
_____	CpE 17	Programming Logic and Design	0	6	2	Co-req CpE16
_____	GEC 122	Art Appreciation	3	0	3	
_____	MST 122	Living in the IT Era	3	0	3	
_____	PATHFiT 2	Exercise-based Fitness Activities	2	0	2	PATHFiT1
_____	NSTP 121	National Service Training Program II	<u>(3)</u>	<u>0</u>	<u>(3)</u>	NSTP111
			19(3)	12	23(3)	

SECOND YEAR

FIRST SEMESTER						
_____	EM 21	Differential Equations	3	0	3	EM16
_____	EM 22	Engineering Data Analysis	3	0	3	EM16
_____	EE 21	Electrical Circuits 1	3	3	4	EM16, Phy121
_____	CpE 21	Object Oriented Programming	0	6	2	CpE16,CpE17
_____	CpE 22	Data Structures and Analysis	0	6	2	Co-requisite CpE21
_____	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	<u>2</u>	<u>0</u>	<u>2</u>	PATHFiT2
			17	15	22	
SECOND SEMESTER						
_____	EM 26	Advanced Engineering Mathematics	3	3	4	EM21
_____	ECE 28	Electronic Circuits, Devices and Analysis	3	3	4	EE21,Chem111
_____	CpE 26	Operating Systems	3	0	3	CpE22
_____	GEC 113	The Contemporary World	3	0	3	
_____	GEC 115	Gender and Society	3	0	3	
_____	Rizal 121	Rizal's Life, Works, and Writings	3	0	3	
_____	GEC 124	Science, Technology and Society	3	0	3	
_____	IC 111	Life and Works of Andres Bonifacio	2	0	2	
_____	PATHFiT 4	Dance/ Sports/ Martial Arts/ Group Exercise/ Outdoor and Adventure Activities	<u>2</u>	<u>0</u>	<u>2</u>	PATHFiT3
			25	6	27	

THIRD YEAR

FIRST SEMESTER

_____	EM	31	Numerical Methods and Analysis	3	3	4	EM21,EM26,CpE21
_____	ES	31	Engineering Economics	3	0	3	3rd Yr. Standing
_____	CpE	31	Software Design	3	3	4	CpE22, CpE26
_____	CpE	32	Fundamentals of Mixed Signals and Sensors	3	3	4	ECE28
_____	CpE	33	Computer Engineering Drafting and Design	0	3	1	ES16, ECE28
_____	ECE	32	Logic Circuits and Switching Theory	3	3	4	ECE28
_____	LIT	311	Philippine Literature	<u>3</u>	<u>0</u>	<u>3</u>	
				18	15	23	

SECOND SEMESTER

_____	CpE	36	Data and Digital Communications	3	3	4	ECE32, ECE28
_____	CpE	Elec1	Elective Course 1	3	0	3	CpE31, CpE32
_____	ECE	38	Feedback and Control Systems	3	3	4	EM31,EM26,ECE28
_____	ECE	39	Microprocessor, Microcontroller Systems and Design	3	3	4	CpE31, CpE32
_____	ES	36	Engineering Management	3	0	3	ES31
_____	ES	37	Methods of Research	3	0	3	3rd Yr. Standing
_____	ES	39	Basic Occupational Safety and Health	<u>3</u>	<u>0</u>	<u>3</u>	3rd Yr. Standing
				21	9	24	

SUMMER

_____	OJT	1	On-the-Job Training (240 hours)	(2 units)	(1 unit)	3	4 th year standing
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FOURTH YEAR

FIRST SEMESTER

_____	ES	41	Technopreneurship 101	3	0	3	4th Yr. Standing
_____	CpE	41	CpE Practice and Design 1	1	3	2	4th Yr. Standing
_____	CpE	42	Computer Networks and Security	3	3	4	CpE36
_____	CpE	43	Introduction to HDL	0	3	1	CpE31,ECE32,ECE39
_____	CpE	44	Computer Architecture and Organization	3	3	4	ECE39, CpE36
_____	ECE	44	Digital Signal Processing	3	3	4	CpE36
_____	CpE	Elec2	Elective Course 2	<u>3</u>	<u>0</u>	<u>3</u>	CpEElec1
				16	15	21	

SECOND SEMESTER

_____	ES	48	Seminars, Colloquium and Field Trips	0	3	1	4th Yr. Standing
_____	CpE	46	CpE Practice and Design 2	1	6	3	CpE41
_____	CpE	47	CpE Laws and Professional Practice	3	0	3	GEC121
_____	CpE	48	Embedded Systems	3	3	4	ECE39
_____	CpE	49	Emerging Technologies in CpE	3	0	3	4th Yr. Standing
_____	CpE	Elec3	Elective Course 3	3	0	3	CpEElec2
_____	GEC	121	Ethics	<u>3</u>	<u>0</u>	<u>3</u>	4th Yr. Standing
				16	12	20	

Elective Course Option 1: Embedded Systems 1, Embedded Systems 2, Embedded Systems 3	Elective Course Option 3: Software Development 1, Software Development 2, Software Development 3
Elective Course Option 2: Microelectronics 1, Microelectronics 2, Microelectronics 3	Elective Course Option 4: System and Network Administration 1, System and Network Administration 2

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	20
B. Natural/Physical Science	8	8
C. Basic Engineering Sciences	7	11
D. Allied Courses	8	8
E. Professional Courses	72	80
F. Cognates Electives	9	9
Sub-total	116	136
II.NON-TECHNICAL COURSES		
A. General Education Courses	24	24
B. GEC Courses/Mandated Courses	12	12
C. Institutional Courses		8
D. Physical Education	8	8
E. National Service Training Program	6	6
Sub-total	50	58
GRAND TOTAL	166	194

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.	Cognates/ Electives	Gen. Educ.	GEC Elec/ Mandated	Institutional	Physical Educ.	NSTP
SECOND SEMESTER												
EM26	Advanced Engineering Mathematics	4										
ECE28	Electronic Circuits, Devices and Analysis				4							
CpE26	Operating Systems					3						
GEC113	The Contemporary World							3				
GEC115	Gender and Society								3			
RIZAL121	Rizal's Life, Works, and Writings								3			
GEC124	Science, Technology and Society							3				
IC111	Life and Works of Andres Bonifacio									2		
PATHFit4	Dance/ Sports/ Martial Arts/ Group Exercise/ Outdoor and Adventure Activities										2	
THIRD YEAR												
FIRST SEMESTER												
EM31	Numerical Methods and Analysis					4						
ES31	Engineering Economics			3								
CpE31	Software Design					4						
CpE32	Fundamentals of Mixed Signals and Sensors					4						
CpE33	Computer Engineering Drafting and Design					1						
ECE32	Logic Circuits and Switching Theory					4						
LIT311	Philippine Literature									3		
SECOND SEMESTER												
CpE36	Data and Digital Communications					4						
CpEElec1	Elective Course 1						3					
ECE38	Feedback and Control Systems					4						
ECE39	Microprocessor, Microcontroller Systems and Design					4						
ES36	Engineering Management			3								
ES37	Methods of Research					3						
ES39	Basic Occupational Safety and Health					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.	Cognates/Electives	Gen. Educ.	GEC Elec/Mandated	Institutional	Physical Educ.	NSTP
<u>FOURTH YEAR</u>												
FIRST SEMESTER												
ES41	Technopreneurship 101			3								
CpE41	CpE Practice and Design 1					2						
CpE42	Computer Networks and Security					4						
CpE43	Introduction to HDL					1						
CpE44	Computer Architecture and Organization					4						
ECE44	Digital Signal Processing					4						
CpEElec2	Elective Course 2						3					
SECOND SEMESTER												
ES48	Seminars, Colloquium and Field Trips					1						
CpE46	CpE Practice and Design 2					3						
CpE47	CpE Laws and Professional Practice					3						
CpE48	Embedded Systems					4						
CpE49	Emerging Technologies in CpE					3						
CpEElec3	Elective Course 3						3					
GEC121	Ethics							3				
Total Units		20	8	11	8	80	9	24	12	8	8	6
<i>Nothing Follows</i>												