Ateneo de Zamboanga University
COLLEGE OF SCIENCE AND INFORMATION TECHNOLOGY
BACHELOR OF SCIENCE IN COMPUTER ENGINEERING (BSCpE)

FIRST YEAR

First Semester

FG	Course No.	Course Title	Units
	ENM.101	Calculus 1: Differential Calculus	3
	ENS.101	Physics 1: Physics for Engineers	4
	COE.101	Computer Engineering as a Discipline	1
	MATMOD	Mathematics in the Modern World	3
	UNDSELF	Understanding the Self	3
	SPIECO	Spirituality & Ecology in the Christian, Ignatian & Islamic Traditions	3
	PATHFIT1	Movement Enhancement	2
	FFP-NSTP1	Freshmen Formation Program/NSTP1	4.5
		Total	**23.5**

Second Semester

FG	Course No.	Course Title	Units
	ENM.102	Calculus 2: Integral Calculus	3
	COE.121	Programming Logic and Design	4
	ENS.103	Chemistry for Engineers	4
	VOCMIS	Vocation and Mission in the Christian, Ignatian and Islamic Traditions	3
	PHIHUM	Philosophy of the Human Person: Social & Political Dimensions	3
	PATHFIT2	Fitness Exercise	2
	FFP-NSTP2	Freshmen Formation Program/NSTP2	4.5
		Total	**23.5**

SUMMER

FG	Course No.	Course Title	Units
	ENG.131	Computer-Aided Design	2
	ENM.104	Engineering Data Analysis	3
	ENG.132	Engineering Management	3

SECOND YEAR

First Semester

FG	Course No.	Course Title	Units
	COE.103	Object-Oriented Programming	4
	COE.301	Fundamentals of Electrical Circuits	4
	ENM.103	Differential Equations	3
	CONWOR	Contemporary World	3
GE ELECT-LM	Literatures of Mindanao	3
	ARTAPP	Art Appreciation	3
	ETHICS	Ethics	3
	PATHFIT3	Dance/Sports/Rec & Games I	2
		Total	**25**

Second Semester

FG	Course No.	Course Title	Units
	COE.302	Fundamentals of Electronic Circuits	4
	ENM.203	Discrete Mathematics	3
	COE.201	Data Structure and Algorithm	4
GE ELECT-DA	Data Analytics	3
	PURCOM	Purposive Communication	3
	SCIETECS	Science, Technology & Society	3
	PHIHIS	Readings in Philippine History	3
	PATHFIT4	Dance/Sports/Rec & Games II	2
		Total	**25**

SUMMER

FG	Course No.	Course Title	Units
	ENG.205	Engineering Economics	3
	ENG.206	Occupational, Health & Safety Engineering	3
	ENM.201	Numerical Methods	3

THIRD YEAR

First Semester

FG	Course No.	Course Title	Units
	COE.202	Operating Systems	3
	COE.303	Logic Circuits and Design	4
	COE.304	Fundamentals of Mixed Signals & Sensors	4
	COE.401	Data & Digital Communications	3
	ENG.201	Technopreneurship	3
	COE.403	Computer Network & Security	4
	CpECog1	Cognate Course 1 - Cybersecurity	3
		Total	**24**

Second Semester

FG	Course No.	Course Title	Units
	COE.203	Software Design	4
	COE.306	Microprocessors	4
	ENG.301	Feedback & Control Systems	3
	ENG.202	Methods of Research	3
	COE.305	Introduction to HDL	1
	COE.307	Embedded Systems	4
	CpECog2	Cognate Course 2 - Introduction to Mobile Apps Development	3
		Total	**22**

SUMMER

FG	Course No.	Course Title	Units
	CpECog3	Cognate Course 3 - Fundamentals of DBMS	3
	COE.204	Computer Organization and Architecture	4

FOURTH YEAR

First Semester

FG	Course No.	Course Title	Units
	COE.501	CpE Practice and Design 1	3
	COE.402	Digital Signal Processing	4
	RIZAL	Life and Works of Rizal	3
	COE.405	CpE Laws & Professional Practice	3
	COE.404	Emerging Technologies in CpE	3
		Total	**16**

Second Semester

FG	Course No.	Course Title	Units
	COE.502	CpE Practice and Design 2	3
	ENG.204	Seminars and Colloquium	3
	OJT	Field Placement and Report (Immersion and OJT 300 hours)	3
		Total	**9**

EFFECTIVE SCHOOL YEAR 2024-2025

Revised: June 2023

COGNATE COURSES:

Course Code	Course Title	Units
COE.511	Mobile Application Programming	**3**
ECE.515	Broadcast Transmission & Distribution	**3**
ECE.404	Modulation and Coding Technique	**3**
COE.512	Database Management Systems	**3**
ECE.510	Advanced Communication Systems and Design (Wireless)	**3**
ECE.511	Advanced Power Supply Systems	**3**

List of Pre-Requisite Courses

Code	Description	Code	Description
	Course Offering		**Pre-Requisite Courses**
ENM 102	Calculus 2: Integral Calculus	ENM 101	Calculus 1: Differential Calculus
ENM 104	Engineering Data Analysis	ENM 101	Calculus 1: Differential Calculus
ENM 103	Differential Equations	ENM 102	Calculus 2: Integral Calculus
COE 301	Fundamentals of Electrical Circuits	ENS 101	Physics for Engineers
COE 103	Object-Oriented Programming	COE 121	Programming Logic and Design
ENM 203	Discrete Math	ENM 101	Calculus 1: Differential Calculus
COE 302	Fundamentals of Electronic Circuits	COE 301	Fundamentals of Electrical Circuits
COE 201	Data Structure and Algorithm	COE 103	Object-Oriented Programming
ENM 201	Numerical Methods	ENM 103	Differential Equations
COE 202	Operating Systems	COE 201	Data Structures and Algorithm
COE 303	Logic Circuit and Design	COE 301	Fundamentals of Electrical Circuits
COE 304	Fundamentals of Mixed Signals and Sensors	COE 302	Fundamentals of Electronic Circuits
COE 401	Data and Digital Communications	COE 302	Fundamentals of Electronic Circuits
COE 203	Software Design	COE 201	Data Structure and Design
COE 306	Microprocessor	COE 303	Logic Circuits and Circuits
ENG 301	Feedback and Control Systems	ENM 201	Numerical Methods
COE 305	Introduction to HDL	COE 302	Fundamentals of Electronic Circuits
COE 402	Digital Signal Processing	ENG 301	Feedback and Control Systems
COE 307	Embedded Systems	COE 306	Microprocessors
COE 204	Computer Organization and Architecture	COE 306	Microprocessors