# **Cebu Institute of Technology University**

Natalio B. Bacalso Ave, Cebu City

College of Computer Studies

# BACHELOR OF SCIENCE IN COMPUTER SCIENCE Curriculum Year 2022-2023

## FIRST YEAR

	FIRS	I YEAR								
First Semester			IDC	UNI	TC					
SUBJECT CODE	SUBJECT NAME/ DESCRIPTION	LEC	JRS LAB	LEC	LAB	Pre-requisites	Co-requisites			
CSIT101	Modern Tools	0.0	3.0	0.0	1.0					
CSIT111	Introduction to Computing	3.0	0.0	3.0	0.0					
CSIT121	Fundamentals of Programming	2.0	3.0	2.0	1.0					
ENGL031	Purposive Communication	3.0	0.0	3.0	0.0					
MATH031	Mathematics in the Modern World	3.0	0.0	3.0	0.0					
NSTP111	National Service Training Program 1	3.0	0.0	3.0	0.0					
PE103	Movement Enhancement	2.0	0.0	2.0	0.0					
PHILO031 PSYCH031	Ethics Understanding the Self	3.0 3.0	0.0	3.0 3.0	0.0					
P31CH031	•									
	TOTAL	22.0	6.0	22.0	2.0					
	TOTAL ACADEMIC UNIT(S	): 24.0								
Second Semeste	<u>r</u>									
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CS132	Introduction to Computer Systems	3.0	0.0	3.0	0.0	CSIT111				
CSIT104	Platform-based Development 1 (Multimedia)	0.0	3.0	0.0	1.0	CSIT101				
CSIT112	Discrete Structures 1	3.0	0.0	3.0	0.0					
CSIT122	Intermediate Programming	2.0	3.0	2.0	1.0	CSIT121				
HUM031	Art Appreciation	3.0	0.0	3.0	0.0					
MATH136	Differential and Integral Calculus	3.0	0.0	3.0	0.0					
NSTP112	National Service Training Program 2	3.0	0.0	3.0	0.0	NSTP111				
PE104	Fitness Exercises	2.0	0.0	2.0	0.0	PE103				
SOCSCI031	Readings in Philippine History	3.0	0.0	3.0	0.0					
	TOTAL	22.0	6.0	22.0	2.0					
	TOTAL ACADEMIC UNIT(S	): 24.0								
		ID YEAF								
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First Semester										
CS231	Discrete Structures 2	3.0	0.0	3.0	0.0	CSIT112				
CS243	Computer Organization and Architecture	2.0	3.0	2.0	1.0	CSIT122,CS132				
CSIT201	Platform-based Development 2 (Web)	0.0	3.0	0.0	1.0	CSIT121				
CSIT213	Social Issues and Professional Practice	3.0	0.0	3.0	0.0	CSIT111				
CSIT221	Data Structures and Algorithms	2.0	3.0	2.0	1.0	CSIT122				
CSIT227	Object-oriented Programming 1	2.0	3.0	2.0	1.0	CSIT122				
GE-CCS1	General Education Elective 1	3.0	0.0	3.0	0.0	DE4.02				
PE205	Physical Activities Towards Health and Fitness I	2.0	0.0	2.0	0.0	PE103				
	TOTAL	17.0	12.0	17.0	4.0					
	TOTAL ACADEMIC UNIT(S	): 21.0								
Second Semeste	r									
	-									
CS234	Special Topics in Mathematics	3.0	0.0	3.0	0.0	CS231,MATH136				
CS244	Design and Analysis of Algorithms	2.0	3.0	2.0	1.0	CS231,CSIT221				
CSIT226	Information Management 1	2.0	3.0	2.0	1.0	CSIT221				
CSIT228	Object-oriented Programming 2	2.0	3.0	2.0	1.0	CSIT227				
CSIT238	Human Computer Interaction	3.0	0.0	3.0	0.0	CSIT104				
CSIT284	Platform-based Development 3 (Mobile)	0.0	3.0	0.0	1.0	CSIT227				
GE-CCS2	General Education Elective 2	3.0	0.0	3.0	0.0					
PE206	Physical Activities Towards Health and Fitness II	2.0	0.0	2.0	0.0	PE103				
	TOTAL	17.0	12.0	17.0	4.0					
	TOTAL ACADEMIC UNIT(S	): 21.0								
THIRD YEAR										
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First Semester										
CS313	Automata Theory and Formal Languages	3.0	0.0	3.0	0.0	CS231,CSIT221				
CS345	Intelligent Systems 1	2.0	3.0	2.0	1.0	CSIT221,CS234				
CSELECTIVE1	CS Elective 1	2.0	3.0	2.0	1.0	CSIT226,CSIT228				
CSIT212	Quantitative Methods	3.0	0.0	3.0	0.0	CSIT112				
CSIT321	Applications Development and Emerging Technologies	2.0	3.0	2.0	1.0	Third				
						Year,CSIT238,CSIT228,CSI T226				
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#### **BACHELOR OF SCIENCE IN COMPUTER SCIENCE**

Curriculum Year 2022-2023

## **THIRD YEAR**

First	Semester

SUBJECT CODE	SUBJECT NAME/ DESCRIPT	ION	HOU LEC	JRS LAB	UNI LEC	TS LAB	Pre-requisites	Co-requisites
CSIT327	Information Management 2		2.0	3.0	2.0	1.0	CSIT226	
ES038	Technopreneurship		3.0	0.0	3.0	0.0		
		TOTAL	17.0	12.0	17.0	4.0		
		TOTAL ACADEMIC UNIT(S)	: 21.0					
Second Semeste	<u>er</u>							
CS322	Programming Languages		2.0	3.0	2.0	1.0	CS313	
CS342	Software Engineering 1		2.0	3.0	2.0	1.0	CSIT321	
CS346	Intelligent Systems 2		2.0	3.0	2.0	1.0	CS345	
CS392	Research Methods		3.0	0.0	3.0	0.0	Third Year,	
CSELECTIVE2	CS Elective 2		2.0	3.0	2.0	1.0	CSIT226,CSIT228	
FREE-EL1	Free Elective 1		3.0	0.0	3.0	0.0	Third Year,	
RIZAL031	The Life and Works of Rizal		3.0	0.0	3.0	0.0		
		TOTAL	17.0	12.0	17.0	4.0		

TOTAL ACADEMIC UNIT(S): 21.0

Summer

CSIT310 OJT/Practicum 1 0.0 6.0 0.0 6.0 Third Year,

TOTAL 0.0 6.0 0.0 6.0

**TOTAL ACADEMIC UNIT(S): 6.0** 

**FOURTH YEAR** 

#### **First Semester**

CS323	Data Communication and Networking		2.0	3.0	2.0	1.0	CS243
CS441	Software Engineering 2		2.0	3.0	2.0	1.0	CS342
CS497	Special Problem 1		3.0	0.0	3.0	0.0	CS392
CSELECTIVE3	CS Elective 3		2.0	3.0	2.0	1.0	CSIT226,CSIT228
GE-CCS3	General Education Elective 3		3.0	0.0	3.0	0.0	
SOCSCI032	The Contemporary World		3.0	0.0	3.0	0.0	
		TOTAL	15.0	9.0	15.0	3.0	

TOTAL ACADEMIC UNIT(S): 18.0

### **Second Semester**

CS348	Operating Systems	2.0	3.0	2.0	1.0	CS323
CS446	Computer Security	2.0	3.0	2.0	1.0	CS323
CS498	Special Problem 2	6.0	0.0	6.0	0.0	CS497
FREE-EL2	Free Elective 2	3.0	0.0	3.0	0.0	Third Year,
STS031	Science, Technology and Society	3.0	0.0	3.0	0.0	

TOTAL 16.0 6.0 16.0 2.0

**TOTAL ACADEMIC UNIT(S): 18.0** 

## Total academic units for course BACHELOR OF SCIENCE IN COMPUTER SCIENCE:

174.0, Lecture Unit = 143.00, Lab Unit = 31.00

## :ELECTIVE SUBJECT LIST:

CS Elective 1 IT365(DATA ANALYTICS 1)
CS Elective 2 CSIT340(INDUSTRY ELECTIVE 1)

CS Elective 3 IT465(DATA ANALYTICS 2), CSIT440(INDUSTRY TRENDS), IT461(ADVANCED WEB SYSTEMS)

Free Elective 1 CSIT337(CORRELATION COURSE)

Free Elective 2 CSIT333(SPECIAL TOPICS IN CS/IT), CSIT335(TESTING AND QUALITY ASSURANCE), FL033(FOREIGN

LANGUAGE 3 (NIHONGO 1))

General Education Elective 1 IT031(LIVING IN THE IT ERA)
General Education Elective 2 ENGL014(TECHNICAL WRITING)

General Education Elective 3