



**College of Computer Studies**  
**BACHELOR OF SCIENCE IN COMPUTER SCIENCE**  
**ENHANCED CURRICULUM SY 2023-2024 (SPECIALIZED IN DATA SCIENCE)**

**FIRST YEAR**

**First Semester**

FIRST YEAR			UNITS			HOURS		Pre-requisites
First Semester			Lec	Lab	Lec	Lab		
_____	Comp 1	Introduction to Computing	3	2	1	2	3	None
_____	Comp 2	Computer Programming 1 (Fundamentals of Programming)	3	2	1	2	3	None
_____	CS 1	Digital Design	3	2	1	2	3	None
_____	GEC-UTS	Understanding the Self	3	3	0	3	0	None
_____	GEC-MATH	Mathematics in the Modern World	3	3	0	3	0	None
_____	Math 1	College Algebra	3	3	0	3	0	None
_____	BSC 1	Being Skills Course 1	1.5	1.5	0	1.5	0	None
_____	PE 1	Physical Fitness & Gymnastic	2	2	0	2	0	None
_____	NSTP 1	National Service Training Program 1	3	3	0	3	0	None
			<b>24.5</b>					

**Second Semester**

_____	CS 2	Computer Organization and Architecture	3	2	1	2	3	CS 1
_____	CS 3	Operating Systems	3	2	1	2	3	CS 1
_____	CS 5	Multimedia Technologies	3	2	1	2	3	Comp 1 & Comp 2
_____	Comp 3	Computer Programming 2 (Intermediate Programming)	3	2	1	2	3	Comp 1 & Comp 3
_____	Math 2	Plane and Spherical Trigonometry	3	3	0	3	0	Math 1
_____	Math 3	Analytic Geometry	3	3	0	3	0	Math 1
_____	BSC 2	Being Skills Course 2	1.5	1.5	0	1.5	0	BSC 1
_____	EPC	English Proficiency	3	3	0	3	0	None
_____	PE 2	Rhythmic Activities	2	2	0	2	0	PE 1
_____	NSTP 2	National Service Training Program 2	3	3	0	3	0	NSTP 1
			<u>27.5</u>					

**SUMMER**

_____	CS 6	Networking 1	3	2	1	2	3	CS 2 & CS 3
_____	CS 11	Elective 1	3	2	1	2	3	CS 5
_____	Comp 4	Data Structures & Algorithms	3	2	1	2	3	Comp 3
_____	PE 3	Individual & Dual Sports	2	2	0	2	0	PE 2
			<u>11</u>					

**SECOND YEAR**

**First Semester**

SECOND YEAR			UNITS			HOURS		Pre-requisites
First Semester			Lec	Lab	Lec	Lab		
_____	CS 4	Systems Analysis and Design	3	2	1	2	3	Comp 4 & CS 3
_____	CS 8	Object-Oriented Programming	3	2	1	2	3	Comp 4
_____	CS 9	Programming Languages	3	2	1	2	3	Comp 4
_____	CS 10	Networking 2	3	2	1	2	3	CS 6
_____	CS 16	Elective 2	3	2	1	2	3	CS 11
_____	Math 4	Differential Calculus	3	3	0	3	0	Math 2 & Math 3
_____	Math 3C	Probability and Statistics	3	3	0	3	0	Math 1
_____	FL	Foreign Language	3	3	0	3	0	None
_____	GEC-STC	Science, Technology & Society	3	3	0	3	0	None
			<b>27</b>					

**Second Semester**

_____	CS 7	Project Management	3	2	1	2	3	CS 4
_____	CS 11A	Computational Statistics	3	2	1	2	3	CS 11
_____	CS 14	Networking 3	3	2	1	2	3	CS 10
_____	CS 15	Software Engineering	3	2	1	2	3	CS 8
_____	CS 18	Elective 3	3	2	1	2	3	CS 16
_____	CS 18A	Artificial Intelligence and Machine Learning	3	2	1	2	3	CS 16

_____	Comp 5	Information Management	3	2	1	2	3	CS 4
_____	Math 5	Integral Calculus	3	3	0	3	0	Math 4
_____	GEC-TCW	The Contemporary World	3	3	0	3	0	None
			<u>27</u>					
<b>SUMMER</b>								
_____	CS 12	Discrete Structures	3	3	0	3	0	Math 5
_____	CS 13	CS Thesis Writing 1	3	3	0	3	0	CS 4 and CS 7
_____	Phys 1	Calculus-based Physics 1	3	1	2	2	3	Math 5
_____	PE 4	Team Sports & Recreation	2	2	0	2	0	PE 3
			<u>11</u>					

THIRD YEAR			UNITS			HOURS		Pre-requisites
First Semester			Lec	Lab	Lec	Lab		
_____	CS 17	Automata Theory and Formal Languages	3	2	0	3	0	CS 12
_____	CS 19	Elective 4	3	2	1	2	3	CS 18
_____	CS 21	Networking 4	3	2	1	2	3	CS 14
_____	CS 22	CS Thesis Writing 2	3	3	0	3	0	CS 13
_____	Comp 6	Application Devt. & Emerging Technologies	3	2	1	2	3	Comp 5
_____	Phys 2	Calculus-based Physics 2	3	1	2	2	3	Phys 1
_____	GEC-RPH	Readings in Philippine History	3	3	0	3	0	None
_____	GEC-ART	Art Appreciation	3	3	0	3	0	None
_____	GEC-PCOM	Purposive Communication	3	3	0	3	0	None
			<b>27</b>					
Second Semester								
_____	CS 20	Modeling and Simulation	3	2	1	2	3	CS 17
_____	Rizal	The Life and Works of Rizal	3	3	0	3	0	None
_____	GEC-ETHICS	Ethics (Professional Ethics)	3	3	0	3	0	None
						3rd Year		
_____	OJT	On-the-Job Training (500 Hours)	3	3	0	3	0	Standing
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- ELECTIVES:**
- CS 11 Elective 1 - Big Data
  - CS 16 Elective 2 - Data Visualization
  - CS 18 Elective 3 - Data Mining
  - CS 19 Elective 4 - Data Analytics