

BS Computer Science- Data Science Curriculum

First Year		
First Semester		18.5 Units
GEC- UTS	Understanding the Self	3
GEC – MATH	Mathematics in the Modern World	3
Comp 1	Introduction to Computing	3
Comp 2	Computer Programming 1 (Fundamentals of Programming)	3
BSC 1	Being Skills Course 1	3
PE 1	Physical Fitness & Gymnastics	3
NSTP 1	National Service Training Program 1	3
Second Semester		21.5 Units
GEC-PCOM	Purposive Communication	3
Math 1	College Algebra	3
CS 1	Digital Design	3
Comp 3	Computer Programming 2 (Intermediate Programming)	3
GEC-ART	Art Appreciation	3
BSC 2	Being Skills Course 2	1.5
PE 2	Rhythmic Activities	2
NSTP 2	National Service Training Program 2	3
Second Year		
First Semester		23 Units
GEC-RPH	Readings in Philippine History	3
GEC-STS	Science, Technology and Society	3
Math 2	Trigonometry	3
Math 3	Analytic Geometry	3
CS 2	Computer Organization and Architecture	3
CS 3	Operating Systems	3
Comp 4	Data Structures and Algorithms	3
PE 3	Individual & Dual Sports	2
Second Semester		23 Units
GEC-TCW	The Contemporary World	3
Math 4	Differential Calculus	3
CS 4	Systems Analysis and Design	3
CS 5	Multimedia Technologies	3
CS 6	Networking 1	3
GEC-Ethics	Ethics (Professional Ethics)	3
EPC	English Proficiency	3
PE 4	Team Sports & Recreation	3
Third Year		
First Semester		24 Units
Math 5	Integral Calculus	3
FL	Foreign Language	3
CS 7	Project Management	3

CS 8	Object-Oriented Programming	3
CS 9	Programming Languages	3
CS 10	Networking 2	3
CS 11	Elective 1	3
Comp 5	Information Management	3
Second Semester		24 Units
Phys 1	Calculus-based Physics 1	3
Math 3C	Probability and Statistics	3
CS 11 A	Computational Statistics	3
CS 12	Discrete Structures	3
CS 13	CS Thesis Writing 1	3
CS 14	Networking 3	3
CS 15	Software Engineering	3
CS 16	Elective 2	3
SUMMER		9 Units
Comp 6	Application Devt. & Emerging Technologies	3
CS 17	Automata Theory and Formal Languages	3
CS 18	Elective 3	3
Fourth Year		
First Semester		21 units
Rizal	The Life and Works of Rizal	3
Phys 2	Calculus-based Physics 2	3
CS 18 A	Artificial Intelligence and Machine Learning	3
CS 19	Elective 4	3
CS 20	Modeling and Simulation	3
CS 21	Networking 4	3
CS 22	CS Thesis Writing 2	3
Second Semester		3 Units
OJT	On-the-Job Training (500 Hours)	3

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