

**BACHELOR OF SCIENCE IN COMPUTER APPLICATIONS (BSCA)**

(List of Courses by Semester)

**BOR Resolution No. 129, Series of 2018**

**First Year, First Semester**

Course No.	Course Title	Units	Hours/Week			Pre-requisite(s)	Co-requisite(s)
			Lec	Lab	Total		
GEC101	Understanding The Self	3	3	0	3	None	None
GEC104	Mathematics in the Modern World	3	3	0	3	None	None
MAT051	Calculus 1	5	5	0	5	None	None
BCA111	Fundamentals of Computer Applications 1	3	2	3	5	None	None
CCC100	Fundamentals of Computing	3	2	3	5	None	None
CCC101	Computer Programming 1	3	2	3	5	None	None
PED001	Exercise Prescription and Management	2	2	0	2	None	None
NST001	National Service Training Program 1	(3)	3	0	30	None	None
Total		19(22)	22	9	31		

**First Year, Second Semester**

Course No.	Course Title	Units	Hours/Week			Pre-requisite(s)	Co-requisite(s)
			Lec	Lab	Total		
GEC102	Purposive Communication	3	3	0	3	None	None
MAT061	Calculus 2	5	5	0	5	MAT051	None
BCA121	Fundamentals of Computer Applications 2	3	2	3	5	None	None
BCA122	Digital Techniques Fundamentals	3	2	3	5	None	None
BCA123	Basic Computer Instrumentation and Measurement	3	2	3	5	None	None
CCC102	Computer Programming 2	3	2	3	5	CCC101	None
PED002	Dance/Martial Arts	2	2	0	2	PED001	None
NST002	National Service Training Program 2	(3)	3	0	3	NST001	None
Total		19(22)	21	12	33		

**Second Year, First Semester**

Course No.	Course Title	Units	Hours/Week			Pre-requisite(s)	Co-requisite(s)
			Lec	Lab	Total		
FIL101	Wika at Kultura sa Mapayapang Lipunan	3	3	0	3	None	None
MAT071	Calculus 3	5	5	0	5	MAT061	None
BCA131	Advanced Computer Circuits	3	2	3	5	BCA121	None
BCA132	Advanced Digital Techniques	3	2	3	5	BCA122	None
BCA133	Data Communication	3	2	3	5	BCA122	None
CCC121	Computer Structures and Algorithms	3	2	3	5	CCC102	None
PED003	Individual/Dual Sports/Traditional/Recreational Games	2	2	0	2	PED001	None
Total		22	18	12	30		

**Second Year, Second Semester**

Course No.	Course Title	Units	Hours/Week			Pre-requisite(s)	Co-requisite(s)
			Lec	Lab	Total		
FPE101	Fundamentals of Peace Education	3	3	0	3	None	None
BCA141	Computer Organization and Architecture	4	3	3	6	BCA122	None
MAT103	Discrete Mathematics	3	3	0	3	None	None
BCA143	Firmware Programming	3	2	3	5	CCC101	None
BCA144	Introduction to Internet of Things	3	2	3	5	CCC102	None
CCC151	Information Management	3	2	3	5	None	None
PED004	Team Sports	2	2	0	2	PED001	None
Total		21	18	9	27		

**Third Year, First Semester**

Course No.	Course Title	Units	Hours/Week			Pre-requisite(s)	Co-requisite(s)
			Lec	Lab	Total		
FIL102	Ekokritisismo at Pagpapahalaga sa Kalikasan	3	3	0	3	None	None
GEC106	Art Appreciation	3	3	0	3	None	None
Elective 1	(Technical Elective 1)	3	2	3	5	(As the course requires)	(As the course requires)
BCA151	Introduction to Operating Systems	3	2	3	5	BCA141	None
BCA152	Microcontrollers	3	2	3	5	CCC102	None
BCA153	Computer Applications in Industry	3	2	3	5	BCA122	None
CCC181	Application Development and Emerging Technologies	3	3	0	3	None	None
Total		21	18	9	27		

**Third Year, Second Semester**

Course No.	Course Title	Units	Hours/Week			Pre-requisite(s)	Co-requisite(s)
			Lec	Lab	Total		
GEC103	The Contemporary World	3	3	0	3	None	None
GEC107	Ethics	3	3	0	3	None	None
GEC109	Life and Works of Rizal	3	3	0	3	None	None
BCA161	Numerical Methods for Computer Applications	3	3	0	3	MAT071	None
HIS003	History of Filipino Muslims and Indigenous People of MINSUPALA	3	3	0	3	None	None
Elective 2	(Technical Elective 2)	3	2	3	5	(As the course requires)	(As the course requires)
BCA198	Research Methods	3	3	0	3	CCC181	None
Total		21	19	6	25		

**Fourth Year, First Semester**

Course No.	Course Title	Units	Hours/Week			Pre-requisite(s)	Co-requisite(s)
			Lec	Lab	Total		
GEC108	Science, Technology and Society	3	3	0	3	None	None
GEC105	Readings in Philippine History	3	3	0	3	None	None
BCA172	Technopreneurship	3	3	0	3	None	None
Elective 3	(Technical Elective 3)	3	2	3	5	(As the course requires)	(As the course requires)
Elective 4	(Technical Elective 4)	3	2	3	5	(As the course requires)	(As the course requires)
BCA199	Undergraduate Thesis	3	3	0	3	BCA198	None
Total		18	15	9	24		

**Fourth Year, Second Semester**

Course No.	Course Title	Units	Hours/Week			Pre-requisite(s)	Co-requisite(s)
			Lec	Lab	Total		
BCA197	On-The-Job-Training	6	0	40	40	BCA198	None
Total		6	0	40	700hrs		

**Grand Total 147(153)**

## **Suggested Technical Elective Subjects**

Course No.	Course Title	Units	Hours/Week			Pre-requisite(s)	Co-requisite(s)
			Lec	Lab	Total		
<b>A. EMBEDDED SYSTEM TRACK</b>							
BCA180	Introduction of Computer Vision	3	2	3	5	CCC102	None
BCA181	HDL Programming	3	2	3	5	CCC102	None
BCA182	Embedded Systems Programming	3	2	3	5	CCC102	None
BCA183	Digital Signal Processing	3	2	3	5	CCC102	None
<b>B: INTERNET OF THINGS (IOT) TRACK</b>							
BCA188	Programming For Internet of Things	3	2	3	5	CCC102	None
BCA189	Applied Internet of Things	3	2	3	5	BCA144	None
BCA190	Artificial Intelligence in Internet of Things	3	2	3	5	BCA144	None
BCA191	Fundamentals of Robotics Systems	3	2	3	5	BCA144	None