



JOY UNIVERSITY
semper paratus

School of Computational Intelligence

Department of Computing & Information Systems

Bachelor of Computer Application (BCA)

Bachelor of Computer Application (Cyber Security) - I Semester

Sl. No.	Course Code	Course Title	L	T	P	Contact Hrs / Wk	Credits
1.	BCCY1111	Fundamentals of Computing	3	0	2	5	4
2.	BCCY1112	Mathematics I	3	1	0	4	4
3.	BCCY1113	Introduction to Programming	3	0	2	5	4
4.	AEEN1111	Effective Communication	3	0	0	3	3
5.	BCCY2111	Performing Arts	0	0	4	4	2
		TOTAL	12	1	8	21	17

Bachelor of Computer Application (Cyber Security) - II Semester

Sl. No.	Course Code	Course Title	L	T	P	Contact Hrs / Wk	Credits
1.	AEEV1121	Environmental Science	2	0	0	2	2
2.	BCCY1121	Discrete Structures	3	0	0	3	3
3.	BCCY1122	Operating System Concepts	3	0	2	5	4
4.	BCCY 1123	Logical Organizations of Computers	3	0	0	3	3
5.	BCCY1124	Numerical and Statistical Methods	3	0	2	5	4
6.	BCCY2121	Office Automation Tools	0	0	4	4	2
7.	SECY 212#	SEC I	0	0	4	4	2
		TOTAL	14	0	12	26	20

Bachelor of Computer Application (Cyber Security) - III Semester

Sl. No.	Course Code	Course Title	L	T	P	Contact Hrs / Wk	Credits
1.	AEPH1213	Professional Ethics	2	0	0	2	2
2.	BCCY1211	Data Structures	3	0	2	6	5
3.	BCCY1212	Database Management Systems	3	1	2	7	6
4.	BCCY1213	Information Theory for Cyber Security	3	0	1	5	4
5.	BCCY1214	Data Encryption	3	0	1	5	4
6.	SECY221#	SEC II	0	0	2	4	2
TOTAL			14	1	8	29	23

Bachelor of Computer Application (Cyber Security) - IV Semester

Sl. No.	Course Code	Course Title	L	T	P	Contact Hrs / Wk	Credits
1.	BCCY1221	Fundamentals of Computer Algorithms	3	1	0	4	4
2.	BCCY1222	Object Oriented Programming	3	0	2	6	5
3.	BCCY1223	Web Programming	3	0	2	6	5
4.	BCCY1224	Software Engineering	3	0	2	6	5
5.	BCCY1225	Steganography and Digital Watermarking	3	0	0	3	3
6.	BCCY1216	Security Assessment and Risk Analysis	3	0	0	3	3
TOTAL			18	1	6	28	25

Bachelor of Computer Application (Cyber Security) - V Semester

Sl. No.	Course Code	Course Title	L	T	P	Contact Hrs / Wk	Credits
1.	BCCY1311	Computer Graphics and Multimedia	3	0	2	6	5
2.	BCCY1312	Computer Networks	3	0	0	3	3
3.	BCCY1313	Management Information Systems	3	0	0	3	3
4.	BCCY1314	Database Security and Access Control	3	0	1	5	4
5.	PECY131#	Program Elective I	3	0	1	5	4
6.	PECY131#	Program Elective II	3	0	1	5	4
7.	GE	Generic Elective	3	0	0	3	3
8.	SECY231#	SEC III	0	0	2	3	2
TOTAL			21	0	7	33	28

Bachelor of Computer Application (Cyber Security) - VI Semester

Sl. No.	Course Code	Course Title	L	T	P	Contact Hrs / Wk	Credits
1.	BCCY1321	Data Mining	3	0	0	3	3
2.	BCCY1322	Distributed Computing	3	0	0	3	3
3.	PECY132#	Program Elective III	3	0	1	5	4
4.	PECY132#	Program Elective IV	3	0	1	5	4
5.	BCCY3321	Project	#	#	#	#	10
TOTAL			12	0	2	16	24

Program Elective I & II

PECY1311 Internet Technologies
 PECY1312 Mobile Application (MA)
 PECY 1313 Ecommerce Technology
 PECY 1314 Cloud Computing
 PECY 1315 Data Analytics
 PECY 1316 Fuzzy logic and Applications
 PECY 1317 Android Programming
 PECY 1318 R Language

Credit Summary

Semesters	Credits
Semester- I	17
Semester- II	20
Semester- III	23
Semester- IV	25
Semester- V	28
Semester- VI	24
Total	137

Program Elective III & IV

PECY 1321 Software Testing
 PECY 1322 Network Security
 PECY 1323 Cyber Forensics
 PECY 1324 Unix and Shell Programming
 PECY 1325 System Programming
 PECY 1326 Distributed Database Systems
 PECY 1327 Decision Support System

SEC I

SECY2121 Designing and Publishing in Computer
 Using Page maker, Photoshop and Corel draw
 SECY2122 HTML Programming

SEC II

SECY2211 Programming in Visual
 Basic/GAMBAS
 SECY22112 Programming in SCILAB

SEC III

SECY2311 Tally Software (Accounting and
 Finance Tally ERP)
 SECY2312 Photo Shop Lab