Bachelor of Computer Applications (Honours with Research) with Industry Oriented Specialization in Computer Networks and Cyber Security

Revised Scheme from 2023

Semester 1

S No.	Name of the Cour	L	T	P	S	C	H	Remarks
1	Open Elective-I	3	0	0	0	3	3	
2	Discrete Mathemat	3	0	0	0	3	3	
3	Computer System	3	0	0	0	3	3	
4	Programming for F	3	0	1	1	5	8	
5	Co-curricular Elec	2	0	0	0	2	2	
6	Vocational Elective	3	0	1	0	4	5	
	Total Credits (BC	**17**	**0**	**2**	**1**	**20**	**24**	

Proposed Scheme from 2023

Semester II

SN	Name of the Cour	L	T	P	S	C	H	Remarks
1	Open Elective-II	3	0	0	0	3	3	
2	Probability and Sta	3	0	0	0	3	3	
3	Data Structures	3	0	1	0	4	5	
4	Object Oriented Pr	3	0	1	1	5	8	
5	Database Managen	3	0	1	1	5	8	
	Total Credits (BC	**15**	**0**	**3**	**2**	**20**	**27**	

Open Elective-II for II sem

SN	Name of the Cour	L	T	P	S	C	H	School
1	Environmental Lite	3	0	0	0	3	3	SOLE
2	Linear Algebra	3	0	0	0	3	3	SBS
3	Understanding Ind	3	0	0	0	3	3	SOLE
4	Report Writing	3	0	0	0	3	3	SOLE
5	Environmental Stu	3	0	0	0	3	3	SBS
6	Introduction to Jap	3	0	0	0	3	3	SOLE

Proposed Scheme from 2023

Semester III

SN	Name of the Cour	L		T	P	S	C	H	Remarks
1	Open Elective-III	3		0	0	0	3	3	
2	Operating Systems	3		0	1	0	4	5	
3	Design and Analys	3		0	1	0	4	5	
4	Java Programming	3		0	1	1	5	8	
5	Elective-I	3		0	0	0	3	3	
	Total Credits (BC	**15**		**0**	**3**	**1**	**19**	**24**	

Proposed Scheme from 2023

Semester IV

Sl No	Name of the Cour	L	T	P	S	C	H	Remarks
1	Machine Learning	3	0	1	1	5	8	
2	Open Elective-IV	3	0	0	0	3	3	
3	Computer Network	3	0	0	0	3	3	
4	Advanced Web Te	3	0	1	1	5	8	
5	Cryptography	3		0	1	0	4	5 CNCS Specialization
	Total Credits (BC	**15**	**0**	**3**	**2**	**20**	**27**	

Proposed Scheme from 2023

Semester V

SN	Name of the Cour	L	T	P	S	C	H	Remarks
1	Software Engineer	3	0	1	0	4	5	nts will do project in
2	Open Elective-V	3	0	0	0	3	3	
3	Campus to Corpor	1	0	1	0	2	3	
4	Mobile Applicatio	3	0	1	1	5	8	
5	Project	0	0	0	0	4	0	
6	Internship	0	0	0	0	4	0	
7	Network Security	3		0	1	0	4	5 CNCS Specialization
	Total Credits (BC	**13**	**0**	**4**	**1**	**26**	**24**	

Proposed Scheme from 2023

Semester VI

Sl No	Name of the Cour	L	T	P	S	C	H	Remarks
1	Capstone Project	0	0	0	0	15		

	Total Credits (BC	0	0	0	0	15	0		

	Credits	I	II	III	IV	V	VI	ToTal
	BCA Specialisatio	20	20	19	20	26	15	120

Proposed Scheme from 2023
Semester VII

SN	Name of the Cour	L	T	P	S	C	H	Remarks
1	Research Methodo	2	0	0	0	2	2	
2	Advanced ML	3	0	1	0	4	5	
3	Optimization Tech	3	0	0	0	3	3	
4	Advanced Data Str	3	0	1	0	4	5	
5	Elective -IV	3	0	0	0	3	5	
6	Research Project-I	0	0	0	4	4	8	
	Total Credits (BC	14	0	2	5	20	31	

Proposed Scheme from 2023
Semester VIII

Sl No	Name of the Cour	L	T	P	S	C	H	Remarks
1	Colloquium	0	0	0	0	5	10	
2	Research Project -	0	0	0	0	15	20	
	Total Credits (BC	0	0	0	0	20	30	

	Total Credits upto	160						

Proposed Scheme from 2023
List of Electives-I for Semester- III

SN	Name of the Cour	L	T	P	S	C	H	Remarks
1	Introduction to Da	3	0	0	0	3	3	
2	Introduction to Co	3	0	0	0	3	3	

List of Electives-II for Semester- IV

SN	Name of the Cour	L	T	P	S	C	H	Remarks

| | 1 | Cryptography | 3 | 0 | 1 | 0 | 4 | 5 | |
| | 2 | Computer Graphic | 3 | 0 | 1 | 0 | 4 | 5 | |

List of Electives-III for Semester- V									
SN	Name of the Cour	L	T	P	S	C	H	Remarks
1	Data Mining and V	**3**	**0**	**1**	**0**	**4**	**5**	
2	BigData	**3**	**0**	**1**	**0**	**4**	**5**	

List of Electives-IV for Semester- VII									
SN	Name of the Elect	L	T	P	S	C	H	Remarks
1	R Programming	2	0	1	0	3	4	
2	Numerical Method	2	0	1	0	3	4	

Specializations Core-I (IV sem)									
Sl No	Name of the Elect	L	T	P	S	C	H	Remarks
1	Cryptography	3	0	1	0	4	5	NCS Specialization

Specializations Core-II (V Sem)									
Sl No	Name of the Elect	L	T	P	S	C	H	Remarks
1	Network Security	3	0	1	0	4	5	NCS Specialization

Vocational category for the programmes which follow NEP 2020									
SN	Course Name	L	T	P	S	C	H	Remarks
1	Introduction to We	3	0	1	0	4	5	Semester 1 and 2
2	Introductory Comp	3	0	1	0	4	5	
3	Office Automation	3	0	1	0	4	5	Semester 3 and 4
4	Introduction to Sys	3	0	1	0	4	5	

Open Elective Basket									
SN	Course Name	L	T	P	S	C	H	Remarks
1	Introduction to Jap	3	0	0	0	3	3	
2	Introduction to Jap	3	0	0	0	3	3	
3	Maths and Puzzles	3	0	0	0	3	3	
4	Environmental Lite	3	0	0	0	3	3	

5	Environmental Stu	3		0	0	0	3	3	Semester 1 and 2
6	Heartfulness (SOL	3		0	0	0	3	3	
7	Introduction to Co	3		0	0	0	3	3	Semester 3 and 4
8	Understanding Ind	2		0	1	0	3	4	
9	Linear Algebra	2		0	1	0	3	4	
10	Report Writing	3		0	0	0	3	3	
11	Principles of Mana	3		0	0	0	3	3	