School of Computer Sciences and Engineering
Department of Computer Science & Application

NEP-2020 Course Structure
Level 4.5
Programme Name: Bachelor of Computer Application (Hons./Hons. with Research)

Semester – I   For the Batch: AY 23-24 onwards

Sr. No.	Category	Course Code	Course Name	Teaching Scheme (Hrs./Week)				Examination Scheme				Total Marks
								Formative Assessment CIA		Summative Assessment ESE		
				L	T	P	C	Course	Lab	Course	Lab	
Major (Mandatory + Electives)												
1	Major	NYCA101	Problem Solving Technique using C	3	--	--	3	50	--	100	--	100
2	Major	NYMT101	Mathematical Foundation for Computer Science	2	1	--	3	50	--	100	--	100
Minor: NA												
			NA									
Open Elective (OE) *												
3	OE		Open Elective - I	4	--	--	4	50	--	100	--	100
Vocational and Skill Enhancement (VSEC)												
4	SEC	NCAS01	Office 365 Laboratory	--	--	4	2	--	50	--	50	100
5	VSC	NYCA111	C Programming Laboratory	--	--	4	2	--	50	--	50	100
Ability/Value Education Courses / Indian Knowledge System (AEC/VEC/IKS) *												
6	AEC		Ability Enhancement Courses - I	--	--	4	2	--	50	--	50	100
7	VEC		Value Education Course - I	--	--	4	2	--	50	--	50	100
8	IKS		Indian Knowledge System - I	--	--	4	2	--	50	--	50	100
OJT/FP/CEP/CC/RP												
8	CC	NYUC111	Co-Curricular Course-I	--	--	4	2	--	50	--	50	100
TOTAL				9	1	24	22	150	300	300	300	900

BoS Chairperson	Dean SOCSA	Associate Dean Academics	Registrar SUN

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School of Computer Sciences and Engineering
Department of Computer Science & Application

.

CIA: Continuous Internal Assessment ESE: End Semester Theory Exam. L: Theory Lecture, T: Tutorial, P: Practical	OJT – On Job Training FP – Field Project CEP – Community Engagement Projects CC – Co-Curricular Course RP – Research Project AEC- Ability Enhancement Courses IKS- Indian Knowledge System VEC- Value Education Courses * - Refer University Notification	CIA	Weightage	Description
		CIA 1	10%	Home Assignment
		CIA 2	20%	Written Exam
		CIA 3	10%	Activity /Project and Research Based Learning along with Seminar Presentations
		CIA 4	10%	Behavioral Attitude +General Discipline Theory +Practical attendance
		CIA TOTAL	**50%**	
	Written Examination – End Semester Exam (ESE)		50%	
		TOTAL	**100%**	

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Chairperson	SOCSA	Academics	SUN

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School of Computer Sciences and Engineering
Department of Computer Science & Application

NEP-2020 Course Structure
Level 4.5
Programme Name: Bachelor of Computer Application (Hons./Hons. with Research)

Semester – II   For the Batch: AY 23-24 onwards

Sr. No.	Category	Course Code	Course Name	Teaching Scheme (Hrs./Week)				Examination Scheme				Total Marks
								Formative Assessment CIA		Summative Assessment ESE		
				L	T	P	C	Course	Lab	Course	Lab	
Major (Mandatory + Electives)												
1	Major	NYCA201	Object Oriented Programming using C++	3	--	--	3	50	--	100	--	100
2	Major	NYCA202	Discrete Mathematics	3	--	--	3	50	--	100	--	100
Minor:												
3	Minor		Minor-I	2	--	--	2	50	--	100	--	100
Open Electives (OE) *												
4	OE		Open Elective - II	4	--	--	4	50	--	100	--	100
Vocational and Skill Enhancement (VSEC)												
5	VSC	NYCA211	Object Oriented Programming using C++ Laboratory	--	--	4	2	--	50	--	50	100
6	SEC	NCAS04	Web Application Development Technologies Laboratory	--	--	4	2	--	50	--	50	100
Ability/Value Education Courses / Indian Knowledge System (AEC/VEC/IKS) *												
7	AEC		Ability Enhancement Courses - II	--	--	4	2	--	50	--	50	100
8	VEC		Value Education Course - II	--	--	4	2	--	50	--	50	100
OJT/FP/CEP/CC/RP												
9	CC		Curricular Course-I	--	--	4	2	--	50	--	50	100
TOTAL				12	-	20	22	200	300	400	300	900

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School of Computer Sciences and Engineering

Department of Computer Science & Application

CIA: Continuous Internal Assessment ESE: End Semester Theory Exam. L: Theory Lecture, T: Tutorial, P: Practical	OJT – On Job Training FP – Field Project CEP – Community Engagement Projects CC – Co-Curricular Course RP – Research Project AEC- Ability Enhancement Courses IKS- Indian Knowledge System VEC- Value Education Courses * - Refer University Notification	CIA	Weightage	Description
		CIA 1	10%	Home Assignment
		CIA 2	20%	Written Exam
		CIA 3	10%	Activity /Project and Research Based Learning along with Seminar Presentations
		CIA 4	10%	Behavioral Attitude +General Discipline Theory +Practical attendance
		CIA TOTAL	50%	
Written Examination – End Semester Exam (ESE)			50%	
		TOTAL	100%	

Exit option: Award of UG Certificate in Major with 40-44 credits and an additional 4 credits of Internship OR Continue with Major and Minor.

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School of Computer Sciences and Engineering
Department of Computer Science & Application

NEP-2020 Course Structure
Level 5.0
Programme Name: Bachelor of Computer Application (Honours /Honours with Research)

Semester – III   **For the Batch: AY 2024-25 onwards**

Sr. No.	Category	Course Code	Course Name	Teaching Scheme (Hrs./Week)				Examination Scheme				Total Marks
								Formative Assessment CIA		Summative Assessment ESE		
				L	T	P	C	Course	Lab	Course	Lab	
Major (Mandatory)												
1	Major	NYCA301	Python Programming	4	--	--	4	50	--	100	--	100
2	Major	NYCA302	Database Management System	4	--	--	4	50	--	100	--	100
Minor:												
3	Minor		Minor-II	4	--	--	4	50	--	100	--	100
Open Electives (OE) *												
4	OE		Open Elective - III	2	--	--	2	50	--	100	--	100
Vocational and Skill Enhancement (VSEC)												
5	VSC	NYCA311	Lab Course Based on Python Programming & Database Management System	--	--	4	2	--	50	--	50	100
Ability/Value Education Courses / Indian Knowledge System (AEC/VEC/IKS) *												
6	AEC		Ability Enhancement Courses - III	--	--	4	2	--	50	--	50	100
OJT/FP/CEP/CC/RP												
7	CC		Co-Curricular Course-II	--	--	4	2	--	50	--	50	100
8	FP	NYCA312	Field project			4	2		50		50	100
TOTAL				14	--	16	22	200	200	400	200	800

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Department of Computer Science & Application

CIA: Continuous Internal Assessment ESE: End Semester Theory Exam. L: Theory Lecture, T: Tutorial, P: Practical	OJT – On Job Training FP – Field Project CEP – Community Engagement Projects CC – Co-Curricular Course RP – Research Project AEC- Ability Enhancement Courses IKS- Indian Knowledge System VEC- Value Education Courses	CIA	Weightage	Description
		CIA 1	10%	Home Assignment
		CIA 2	20%	Written Exam
		CIA 3	10%	Activity /Project and Research Based Learning along with Seminar Presentations
		CIA 4	10%	Behavioral Attitude +General Discipline Theory +Practical attendance
	* - Refer University Notification	**CIA TOTAL**	**50%**	
	Written Examination – End Semester Exam (ESE)		50%	
		TOTAL	**100%**	

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School of Computer Sciences and Engineering
Department of Computer Science & Application

NEP-2020 Course Structure
Level 5.0
Programme Name: Bachelor of Computer Application (Honours /Honours with Research)
Semester – IV   For the Batch: AY 2023-24 onwards

Sr. No.	Category	Course Code	Course Name	Teaching Scheme (Hrs./Week)				Examination Scheme				Total Marks
								Formative Assessment CIA		Summative Assessment ESE		
				L	T	P	C	Course	Lab	Course	Lab	
Major (Mandatory)												
1	Major	NYCA401	Advanced Python Programming	4	--	--	4	50	--	100	--	100
2	Major	NYCA402	Relational Database Management System	4	--	--	4	50	--	100	--	100
Minor:												
3	Minor		Minor-III	4	--	--	4	50	--	100	--	100
Open Electives (OE) *												
4	OE		Open Elective - IV	2	--	--	2	50	--	100	--	100
Vocational and Skill Enhancement (VSEC)												
5	SEC	NYCA411	Lab Course Based on Advanced Python Programming & Relational Database Management System	--	--	4	2	--	50	--	50	100
Ability/Value Education Courses / Indian Knowledge System (AEC/VEC/IKS) *												
6	AEC		Ability Enhancement Course-IV	--	--	4	2	--	50	--	50	100
OJT/FP/CEP/CC/RP												
7	CEP	NYCA412	Community Engagement Project	--	--	4	2	--	50	--	50	100
8	CC		Co-Curricular Course-III	--	--	4	2	--	50	--	50	100
	TOTAL			14	-	16	22	200	200	400	200	800

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Department of Computer Science & Application

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		CIA	Weightage	Description
CIA: Continuous Internal Assessment **ESE**: End Semester Theory Exam. **L**: Theory Lecture, **T**: Tutorial, **P**: Practical	**OJT** – On Job Training **FP** – Field Project **CEP** – Community Engagement Projects **CC** – Co-Curricular Course **RP** – Research Project **AEC**- Ability Enhancement Courses **IKS**- Indian Knowledge System **VEC**- Value Education Courses * - Refer University Notification			
		CIA 1	10%	Home Assignment
		CIA 2	20%	Written Exam
		CIA 3	10%	Activity /Project and Research Based Learning along with Seminar Presentations
		CIA 4	10%	Behavioral Attitude +General Discipline Theory +Practical attendance
		CIA TOTAL	**50%**	
	Written Examination – End Semester Exam (ESE)		50%	
		TOTAL	**100%**	

Exit option: Award of UG Diploma in Major and Minor with 80-88 credits and an additional 4 credits Core NSQF course/Internship OR Continue with Major and Minor.

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School of Computer Sciences and Engineering
Department of Computer Science & Application

NEP-2020 Course Structure
Programme Name: Bachelor of Computer Application (Hons./Hons. with Research)

Semester – V   **For the Batch: AY 2023-24 onwards**

Sr. No.	Category	Course Code	Course Name	Teaching Scheme (Hrs./Week)				Examination Scheme				Total Marks
				L	T	P	C	Formative Assessment CIA		Summative Assessment ESE		
								Course	Lab	Course	Lab	
Major (Mandatory + Electives)												
1	Major	NYCA501	Java Programming	4	--	--	4	50	--	100	--	100
2	Major	NYCA502	Cloud Computing	4	--	--	4	50	--	100	--	100
3	Major	NYCA503	Node JS	2	--	--	2	50	--	100	--	100
Major Electives (ME)												
3	Major	NYCAE_	Major Elective-I	4	--	--	4	50	--	100	--	100
Minor:												
4	Minor	NYCAM_	Minor-IV	4	--	--	4	50	--	100	--	100
Vocational and Skill Enhancement (VSEC)												
5	VSC	NYCA511	Java Programming Laboratory	--	--	4	2	--	50	--	50	100
Ability/Value Education Courses / Indian Knowledge System (AEC/VEC/IKS) *												
6	AEC	NHSA13	Ability Enhancement Courses - V	--	--	4	2	--	50	--	50	100
OJT/FP/CEP/CC/RP												
7	FP	NYCA512	Field Project-II	--	--	4	2	--	50	--	50	100
	TOTAL			18	--	12	24	250	150	500	150	800

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School of Computer Sciences and Engineering
Department of Computer Science & Application

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CIA: Continuous Internal Assessment	OJT – On Job Training	CIA	Weightage	Description
	FP – Field Project			
ESE: End Semester Theory Exam.	CEP – Community Engagement Projects	CIA 1	10%	Home Assignment
		CIA 2	20%	Written Exam
L: Theory Lecture,	CC – Co-Curricular Course			
T: Tutorial,	RP – Research Project	CIA 3	10%	Activity /Project and Research Based Learning along with Seminar Presentations
P: Practical	* - Refer University Notification	CIA 4	10%	Behavioral Attitude +General Discipline Theory +Practical attendance
		CIA TOTAL	**50%**	
	Written Examination – End Semester Exam (ESE)		50%	
		TOTAL	**100%**	

	MINOR-IV		
Sr. No	**Semester**	**Course Code**	**Name of the course (Choose any One)**
1	V	NYCAM04	Linux Operating System

List of Major Elective

Sr.No	Couse Code	Course Name
1	NYCAE01	Computer Network
2	NYCAE02	Computer Graphics

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School of Computer Sciences and Engineering
Department of Computer Science & Application

NEP-2020 Course Structure
Programme Name: Bachelor of Computer Application (Hons./Hons. with Research)

Semester – VI   **For the Batch: AY 2025-26 onwards**

Sr. No.	Category	Course Code	Course Name	Teaching Scheme (Hrs./Week)				Examination Scheme				Total Marks
				L	T	P	C	Formative Assessment CIA		Summative Assessment ESE		
								Course	Lab	Course	Lab	
Major (Mandatory + Electives)												
1	Major	NYCA601	Advanced Java	4	--	--	4	50	--	100	--	100
2	Major	NYCA602	Android Programming	4	--	--	4	50	--	100	--	100
Major Electives (ME)												
3	Major		Major Elective-II	2	--	--	2	50	--	100	--	100
Minor:												
4	Minor	NYCAM_	Minor-V	4	--	--	4	50	--	100	--	100
Vocational and Skill Enhancement (VSEC)												
5	VSC	NYCA611	Android Programming and Advanced Java Laboratory	--	--	4	2	--	50	--	50	100
Ability/Value Education Courses / Indian Knowledge System (AEC/VEC/IKS) *												
6	AEC	NHSA14	Ability Enhancement Courses - VI	--	--	4	2	--	50	--	50	100
OJT/FP/CEP/CC/RP												
7	OJT	NYCA612	Project Based on Android Programming Or Advance Java	--	--	4	4	--	50	--	50	100
		TOTAL										

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School of Computer Sciences and Engineering
Department of Computer Science & Application

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		CIA	Weightage	Description
CIA: Continuous Internal Assessment **ESE**: End Semester Theory Exam. **L**: Theory Lecture, **T**: Tutorial, **P**: Practical	OJT – On Job Training FP – Field Project CEP – Community Engagement Projects CC – Co-Curricular Course RP – Research Project * - Refer University Notification	CIA 1	10%	Home Assignment
		CIA 2	20%	Written Exam
		CIA 3	10%	Activity /Project and Research Based Learning along with Seminar Presentations
		CIA 4	10%	Behavioral Attitude +General Discipline Theory +Practical attendance
		CIA TOTAL	**50%**	
	Written Examination – End Semester Exam (ESE)		50%	
		TOTAL	**100%**	

MINOR			
Sr. No	Semester	Course Code	Name of the course (Choose any One)
1	VI	NYCAM05	Internet of Things

List of Major Electives :II

Sr.No	Couse Code	Course Name
1	NYCAE03	Software Testing
2	NYCAE04	Big Data

Exit option: Award of Three Year Bachelor's Degree in Major with 120-132 credits and an additional 4 credits of Internship OR Continue with Major and Minor.

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School of Computer Sciences and Engineering
Department of Computer Science & Application

NEP-2020 Course Structure
Level 6.0
Programme Name: Bachelor of Computer Application (Honours)

Semester – VII   For the Batch: AY 2023-24 onwards

Sr. No.	Category	Course Code	Course Name	Teaching Scheme (Hrs./Week)				Examination Scheme				Total Marks
								Formative Assessment CIA		Summative Assessment ESE		
				L	T	P	C	Course	Lab	Course	Lab	
Major (Mandatory)												
1	Major	NYCA701	React JS	4	--	--	4	50	--	100	--	100
2	Major	NYCA702	Machine Learning	4	--	--	4	50	--	100	--	100
3	Major	NYCA703	Software Project Management	2	--	--	2	50	--	100	--	100
4	Major	NYCA704	Object Analysis and Design	4	--	--	4	50	--	100	--	100
Major Electives (ME) :												
5	ME	NYCAE__	Major Elective-III	4	--	--	4	50	--	100	--	100
Minor:												
6	Minor		Minor-VI	4	--	--	4	50	--	100	--	100
TOTAL				**22**	**--**	**--**	**22**	**300**	**--**	**600**	**--**	**600**

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School of Computer Sciences and Engineering
Department of Computer Science & Application

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		CIA	Weightage	Description
CIA: Continuous Internal Assessment **ESE**: End Semester Theory Exam. **L**: Theory Lecture, **T**: Tutorial, **P**: Practical	**OJT** – On Job Training **FP** – Field Project **CEP** – Community Engagement Projects **CC** – Co-Curricular Course **RP** – Research Project **AEC**- Ability Enhancement Courses **IKS**- Indian Knowledge System **VEC**- Value Education Courses	CIA 1	10%	Home Assignment
		CIA 2	20%	Written Exam
		CIA 3	10%	Activity /Project and Research Based Learning along with Seminar Presentations
		CIA 4	10%	Behavioral Attitude +General Discipline Theory +Practical attendance
	* - Refer University Notification	**CIA TOTAL**	**50%**	
	Written Examination – End Semester Exam (ESE)		50%	
		TOTAL	**100%**	

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School of Computer Sciences and Engineering
Department of Computer Science & Application

NEP-2020 Course Structure
Level 6.0
Programme Name: Bachelor of Computer Application (Honours)

Semester – VIII   **For the Batch: AY 2023-24 onwards**

Sr. No.	Category	Course Code	Course Name	Teaching Scheme (Hrs./Week)				Examination Scheme				Total Marks
								Formative Assessment CIA		Summative Assessment ESE		
				L	T	P	C	Course	Lab	Course	Lab	
Major (Mandatory)												
1	Major	NYCA801	Node JS	4	--	--	4	50	--	100	--	100
2	Major	NYCA802	Data Visualization using Power BI	4	--	--	4	50	--	100	--	100
3	Major	NYCA803	Cyber Security Essentials	2	--	--	2	50	--	100	--	100
4	Major	NYCA804	Principle of Management	4	--	--	4	50	--	100	--	100
Major Electives (ME)												
5	ME	NYCAE__	Major Elective-IV	4	--	--	4	50	--	100	--	100
OJT/FP/CEP/CC/RP												
6	OJT	NYCA811	Internship-II	--	--	8	4	--	50	--	50	100
TOTAL				18	--	8	22	250	50	500	50	600

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School of Computer Sciences and Engineering
Department of Computer Science & Application

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CIA: Continuous Internal Assessment **ESE**: End Semester Theory Exam. **L**: Theory Lecture, **T**: Tutorial, **P**: Practical	**OJT** – On Job Training **FP** – Field Project **CEP** – Community Engagement Projects **CC** – Co-Curricular Course **RP** – Research Project **AEC**- Ability Enhancement Courses **IKS**- Indian Knowledge System **VEC**- Value Education Courses * - Refer University Notification	**CIA**	**Weightage**	**Description**
		CIA 1	10%	Home Assignment
		CIA 2	20%	Written Exam
		CIA 3	10%	Activity /Project and Research Based Learning along with Seminar Presentations
		CIA 4	10%	Behavioral Attitude +General Discipline Theory +Practical attendance
		CIA TOTAL	**50%**	
	Written Examination – End Semester Exam (ESE)		50%	
		TOTAL	**100%**	

Four-year Bachelor of Computer Application Honours in Major & Minor with 160-176 Credits

BoS Chairperson	Dean SOCSA	Associate Dean Academics	Registrar SUN

School of Computer Sciences and Engineering
Department of Computer Science & Application

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NEP-2020 Course Structure
Level 6.0
Programme Name: Bachelor of Computer Application (Honours with Research)
Semester – VII   **For the Batch: AY 2023-24 onwards**

Sr. No.	Category	Course Code	Course Name	Teaching Scheme (Hrs./Week)				Examination Scheme				Total Marks
				L	T	P	C	Formative Assessment CIA		Summative Assessment ESE		
								Course	Lab	Course	Lab	
Major (Mandatory)												
1	Major	NYCA701	React JS	4	--	--	4	50	--	100	--	100
2	Major	NYCA702	Object Oriented Analysis and Design	4	--	--	4	50	--	100	--	100
3	Major	NYCA703	Software Project Management	2	--	--	2	50	--	100	--	100
Major Electives (ME) :												
4	ME	NYCAE__	Major Elective-III	4	--	--	4	50	--	100	--	100
Minor:												
5	Minor		Minor-VI	4	--	--	4	50	--	100	--	100
OJT/FP/CEP/CC/RP												
6	RP	NYCA711	Research Project I	--	--	8	4	--	100	--	100	200
	TOTAL			18	--	8	22	250	100	500	100	700

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School of Computer Sciences and Engineering
Department of Computer Science & Application

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ESE: End Semester Theory Exam.

L: Theory Lecture,

T: Tutorial,

P: Practical</td>
<td rowspan="2">OJT – On Job Training
FP – Field Project
CEP – Community Engagement Projects
CC – Co-Curricular Course
RP – Research Project
AEC- Ability Enhancement Courses
IKS- Indian Knowledge System
VEC- Value Education Courses

* - Refer University Notification</td>
<td>CIA</td>
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<td>CIA 4</td>
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<td>Behavioral Attitude +General Discipline Theory +Practical attendance</td>
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<td>CIA TOTAL</td>
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<td colspan="2">Written Examination – End Semester Exam (ESE)</td>
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Sandip University, Nashik (MS), India
At Post Mahiravani, Trimbak Road, Nashik-422213, Maharashtra
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School of Computer Sciences and Engineering
Department of Computer Science & Application

NEP-2020 Course Structure
Level 6.0
Programme Name: Bachelor of Computer Application (Honours with Research)

Semester – VIII   For the Batch: AY 2023-24 onwards

Sr. No.	Category	Course Code	Course Name	Teaching Scheme (Hrs./Week)				Examination Scheme				Total Marks
								Formative Assessment CIA		Summative Assessment ESE		
				L	T	P	C	Course	Lab	Course	Lab	
Major (Mandatory)												
1	Major	NYCA801	Node JS	4	--	--	4	50	--	100	--	100
2	Major	NYCA802	Data Visualization using Power BI	4	--	--	4	50	--	100	--	100
3	Major	NYCA803	Cyber Security Essentials	2	--	--	2	50	--	100	--	100
Major Electives (ME)												
4	ME	NYCAE__	Major Elective-IV	4	--	--	4	50	--	100	--	100
OJT/FP/CEP/CC/RP												
5	RP	NYCA811	Research Project II	--	--	16	8	--	100	--	100	200
TOTAL				14	--	16	22	200	100	400	100	600

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		CIA	Weightage	Description
CIA: Continuous Internal Assessment **ESE**: End Semester Theory Exam. **L**: Theory Lecture, **T**: Tutorial, **P**: Practical	**OJT** – On Job Training **FP** – Field Project **CEP** – Community Engagement Projects **CC** – Co-Curricular Course **RP** – Research Project **AEC**- Ability Enhancement Courses **IKS**- Indian Knowledge System **VEC**- Value Education Courses * - Refer University Notification	CIA 1	10%	Home Assignment
		CIA 2	20%	Written Exam
		CIA 3	10%	Activity /Project and Research Based Learning along with Seminar Presentations
		CIA 4	10%	Behavioral Attitude +General Discipline Theory +Practical attendance
		CIA TOTAL	**50%**	
	Written Examination – End Semester Exam (ESE)		50%	
		TOTAL	**100%**	

Four Year Bachelor of Computer Application Honours with Research in Major & Minor with 160-176 Credits

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NEP 2020- Ability Enhancement Course (AEC) Basket (For the Batch 2025-26 Onwards)
Program: BCA (Bachelor of Computer Application)

Sr. No.	Course Code	Name of the Course	Semester
1	NHSA01	Communicative English	
2	NHSA05	Elementary Marathi	I
3	**NHSA09**	**Linguaskills I**	
4	NHSA02	Personality Development and Soft Skill	
5	NHSA04	Introduction to Sanskrit	II
6	**NHSA10**	**Linguaskills 2**	
7	NCAA01	Leadership Skills and Team Management	
8	NCAA02	Sustainable Development	III
9	**NHSA11**	**Key Competencies for Career Growth**	
7	NCAA03	Creative Writing	
8	NCAA04	Reading Indian Fiction in English	IV
9	**NHSAI2**	**Strategic Communication for Professtonas**	
10	**NHSA13**	**Essential Aptitude Skills**	V
11	**NHSA14**	**Employability Skills and Career Advancement**	VI

NEP 2020 Value Education Course (VEC) Basket (For the Batch 2024-25 Onwards)
Program: BCA (Bachelor of Computer Application)

Sr. No.	Course Code	Name of the Course	Semester
1	NSSV01	**Environmental Studies**	
2	NCAV01	Human Values and Professional Ethics	I
3	NLWV01	**Constitution and Human Rights**	
4	NCAV02	Science and Society	II

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NEP 2020 Indian Knowledge System (IKS) Basket (For the Batch 2024-25 Onwards)
Program: BCA (Bachelor of Computer Application)

Sr. No.	Course Code	Name of the Course	Semester
1	NCAI01	**Indian Epics**	
2	NCAI02	Ancient Indian History and Culture	
3	NCAI03	Vedic Literature	**I**
4	NCAI04	Ancient Indian Mathematicians	

NEP 2020- Co-Curricular Activity (CC) Basket (For the Batch 2024-25 Onwards)
Program: BCA (Bachelor of Computer Application)

Sr. No.	Course Code	Name of the Course	Semester
1	NYUC111	**Yoga and Meditation**	I
2	NCAC01	Solid Waste Management	
3	NCAC02	**Health and Wellness**	II
4	NCAC03	Essence of Good Governance	
5	NCAC04	**e-Waste Management**	III
6	NCAC05	Knowing India's Heritage	
7	NCAC06	**Soil and Water Resource Conservation**	IV
8	NCAC07	Social Responsibilities and Ethics	

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NEP 2020- Minor Basket (For the Batch 2024-25 Onwards)
Program: BCA (Bachelor of Computer Application)

Sr. No.	Course Code	Name of the Course	Credits	Semester
1	NYCAM01	Web Application Development Technologies	2	II
2	NYCAM02	Data Structure using C	4	III
3	NYCAM03	Software Engineering	4	IV
4	NYCAM04	Linux Operating System	4	V
5	NYCAM05	Internet of Things	4	VI

NEP 2020- Open Elective Basket (For the Batch 2024-25 Onwards)
Program: BCA (Bachelor of Computer Application)

Sr. No.	Course Code	Name of the Course	Semester
1	NCAO01	Fundamental of Computers	I
2	NCAO02	IT Security	
3	NCAO03	Applications of Artificial Intelligence	
4	NCAO04	Computer Hardware	II
5	NCAO05	Introduction to IOT	
6	NCAO06	Digital Fluency	
7	NCAO07	Fundamentals of Artificial Intelligence and Machine Learning	III
8	NCAO08	Operating System	
9	NCAO09	Digital Electronics	IV
10	NCAO10	Big Data Analytics	

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NEP 2020- Major Elective Basket (For the Batch 2024-25 Onwards)
Program: BCA (Bachelor of Computer Application)

Sr. No.	Course Code	Name of the Course	Semester
1	NYCAE01	Computer Network	V
2	NYCAE02	Computer Graphics	
3	NYCAE03	Software Testing	VI
4	NYCAE04	Big Data	
5	NYCAE05	Python Framework-Django	VII
6	NYCAE06	Docker & Kubernetes	
7	NYCAE07	Data Science	VIII
8	NYCAE08	Advanced Algorithms	

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