BVVS
BASAVESHWAR ENGINEERING COLLEGE, BAGALKOTE

Department of Information Science and Engineering

UG SCHEME OF TEACHING AND EXAMINATION
(Admitted from 2024-2025 onwards)
Applicable to students admitted in AY 2024-25 to 1st sem and through lateral entry in AY 2025-26 to 3rd sem (4th NEP Batch)

Presented By
Dr. S P Bangarashetti
Professor and Head

Department of Information Science and Engineering
Proposed Curriculum Framework for BE Program
(For the Students admitted to first year from 2024-2025 onwards and to 2nd year lateral entry from 2025-2026 onwards)

S.No.	Category	VTU	AICTE	BEC Present	BEC Revised
1.	HSMC: HSS (English:2, Kannada:1, UHV,: 1 Constitution:1, EV:1), HRM:3 (Offered by Dept) = 9AEC (Scientific foundations of Health: 1, Innovation and design Thinking: 1, SS:2, IKS: 1, MOOCS: 3) = 08	14+8 =22	15	9+10 =19	9+8 =17
2.	BSC: Basic Science Courses (Physics, Chemistry and Mathematics)	22	23	22	22
3.	ESC/ETC: Engineering Science Courses (Basic Elect /Electronics/ Computer/ Mechanics/ Workshop/ Drawing etc.)	18	17	18	18
4.	PCC: Professional Core Courses	57	61	56	61
5.	PEC: Professional Elective Courses relevant to the branch with at least one course either fully or partially supported by industry	12	12	12	12
6.	OEC: Open Electives Courses/ Subjects from other technical/Arts/Commerce (3 MOOCS + 6)	9	12	09	09
7.	Mini (2) and Major projects (9)/Industrial Internships (10)	20	20	24	21
8.	Mandatory Course: PE, Yoga, NSS, Bridge course Maths 1 and 2 (lateral Entry)	00	00	00	00
	Total	**160**	**160**	**160**	**160**

Department of Information Science and Engineering
Suggestive Break-up of Credits for B.E (Common to all Branches)
(For the Students admitted to first year from 2024-2025 onwards and to 2nd year lateral entry from 2025-2026 onwards)
(4th   NEP Batch)

Sem.	BSC	ESC/ETC	HSMC	AEC	PCC	PEC	OEC	Proj.	Int.	Total
1.	08	09	02	1(SFH)						20
2.	08	09	02	1(IDT)						20
3.	03				17					20
4.	03		01		16					20
5.			01	2 (SS)	09	03	03	02		20
6.				1(IKS)	13	03	03			20
7.			03		06	06		09		24
8.				3 (MOOCS)			3 (MOOCS)		10	16
Tot.	22	18	09	08	61	12	09	11	10	160

Department of Information Science and Engineering
B. E. I semester Scheme of Teaching and Examinations
(Effective from the academic year 2024-25)

I Semester (CSE Stream)　　　　**Branches: CS, IS, AIML and BT**　　　　**(Physics Group)**

Applicable to students admitted in AY 24-25 to 1st sem and through lateral entry in AY 25-26 to 3rd sem (4th NEP Batch)

Sl. No.	Course				Credits	Teaching Hours/Week			Examination			
	Category	Code	Title	TD		Theory Lecture (L)	Tutorial (T)	Practical/ Drawing (P)	Duration in hours	CIE Marks	SEE Marks	Total Marks
1	BSC(IC)	BMAS101C	Mathematics-I for CSE Stream	Maths	04	3	0	2	03	50	50	100
2	BSC(IC)	BPHS202C	Applied Physics for CSE stream	Physics	04	3	0	2	03	50	50	100
3	ESC	BCSAS103C	Principles of Programming Using C	ISE/CSE	03	3	0	2	03	50	50	100
4	ESC-I	BECA104N	Engineering Science Course-I (Introduction to Electronics and Communication)	Respective Engg Dept	03	3	0	0	03	50	50	100
5	ETC-I	BISA105B	Emerging Technology Course-I (Introduction to Internet of Things)	Any Dept	03	3	0	0	03	50	50	100
6	AEC	BHSA106C	Communicative English	Humanities	01	1	0	0	01	50	50	100
7	HSMC	BHSA107C	Indian Constitution	Humanities	01	1	0	0	01	50	50	100
8	AEC	BHSA108C	Scientific Foundations of Health	Any Dept	01	1	0	0	01	50	50	100
			Total		**20**	**18**	**0**	**06**	**18**	**400**	**400**	**800**

Sem	BSC	ESC	HSMC	AEC	PCC	PEC	OEC	Proj.	Int.	Total
1	08	09	02	1						20

Department of Information Science and Engineering
B. E. II semester Scheme of Teaching and Examinations
(Effective from the academic year 2024-25)

II Semester (CSE Stream)   (Physics Group)

Applicable to students admitted in AY 2024-25 to 1st sem and through lateral entry in AY 2025-26 to 3rd sem (4th NEP Batch)

Sl. No.	Course				Credits	Teaching Hours/Week			Examination			
	Category	Code	Title	TD		Theory Lecture L	Tutorial T	Practical/ Drawing P	Duration in hours	CIE Marks	SEE Marks	Total Marks
1	BSC(IC)	BMAS201C	Mathematics-II for CSE Stream	Maths	4	3	0	2	03	50	50	100
2	BSC(IC)	BCHS202C	Applied Chemistry for CSE Stream	Chemistry	4	3	0	2	03	50	50	100
3	ESC	BMEB203C	Computer-Aided Engineering Drawing	Civil/Mech Engg dept	3	2	0	2	03	50	50	100
4	ESC-II	BEEA204N	Engineering Science Course-II (Introduction Electrical Engineering)	Respective Engg. Dept	3	3	0	0	03	50	50	100
5	PLC-II	BCSB205D	Programming Language Course-II (Introduction to Python Programming)	Any Dept	3	2	0	2	03	50	50	100
6	HSSM	BHSB206C	Professional Writing Skills in English	Humanities	1	1	0	0	01	50	50	100
7	HSSM	BHSB107C BHSC107C	Samskrutika Kannada Balake Kannada	Humanities	1	1	0	0	01	50	50	100
8	AEC	BHSB108C	Innovation and Design Thinking	Any Dept	1	1	0	0	01	50	50	100
			Total		**20**	**16**	**0**	**08**	**18**	**400**	**400**	**800**

Sem	BSC	ESC	HSMC	AEC	PCC	PEC	OEC	Proj.	Int.	Total
2	08	09	02	1						20

Department of Information Science and Engineering
3rd Semester
Applicable to students admitted in AY 2024-25 to 1st sem and through lateral entry in AY 2025-26 to 3rd sem (4th NEP Batch)

Sl. No.	Course			Credits	Teaching Hours/Week			Examination			
	Category	Code	Title		Theory Lecture	Tutorial	Practical/ Drawing	Duration in hours	CIE Marks	SEE Marks	Total Marks
					L	T	P				
1	BSC	BMAS301C	Mathematics for Computer Science Stream	3	3	0	0	3	50	50	100
2	PCC	BISA302C	Digital Design and Computer Organization	4	3	2	0	3	50	50	100
3	IPCC	BISA303C	Operating Systems (Integrated)	4	3	0	2	3	50	50	100
4	PCC	BISA304C	Data Structures and Applications	3	3	0	0	3	50	50	100
5	PCCL	BISA381L	Data Structures and Applications Lab using C	1.5	0	0	3	3	50	50	100
6	PCC	BISA305C	Object Oriented Programming with Java	3	3	0	0	3	50	50	100
7	PCCL	BISA382L	OOP with Java Lab	1.5	0	0	3	3	50	50	100
8	MC	BHSC360M	National Service Scheme	0	0	0	2	2	100	0	100
		BHSB360M	Physical Education (Sports and Athletics)								
		BHSA360M	Yoga								
9		AAP	AICTE Activity Points								
			Total	20	15	2	10	23	450	350	800

Sem.	BSC	ESC	HSMC	AEC	PCC	PEC	OEC	Proj.	Int.	Total
3	03				17					20

Department of Information Science and Engineering
4th Semester
Applicable to students admitted in AY 24-25 to 1st sem and through lateral entry in AY 2025-26 to 3rd sem (4th NEP Batch)

Sl. No.	Category	Code	Title	Credits	Theory Lecture L	Tutorial T	Practical/ Drawing P	Duration in hours	CIE Marks	SEE Marks	Total Marks
1	IPCC	BISA401C	Web Programming (Integrated)	**3**	**2**	**0**	**2**	3	50	50	100
2	IPCC	BISA402C	Design & Analysis of Algorithms using Java (Integrated)	**4**	3	0	2	3	50	50	100
3	PCC	BISA403C	Introduction to AI	**3**	3	0	0	3	50	50	100
4	PCC	BISA404C	Discrete Mathematical Structure	**3**	2	2	0	3	50	50	100
5	PCC	BISA406C	Theory of Computations	**3**	3	0	0	3	50	50	100
6	BSC	BBT405C	Biology for Computer Engineers	3	3	0	0	3	50	50	100
7	HSMC	BHSA424C	Universal human values course	1	1	0	0	1	50	50	100
8	MC	BHSC460M	National Service Scheme	0	0	0	2	0	0	0	0
		BHSB460M	Physical Education (Sports and Athletics)								
		BHSA460M	Yoga								
9		AAP	AICTE Activity Points								
			Total	**20**	**17**	**2**	**6**	**19**	**350**	**350**	**700**

Sem.	BSC	ESC	HSMC	AEC	PCC	PEC	OEC	Proj.	Int.	Total
04	03		1		16					20

Department of Information Science and Engineering
5th Semester
Applicable to students admitted in AY 2024-25 to 1st sem and through lateral entry in AY 2025-26 to 3rd sem (4th NEP Batch)

Sl. No.	Course Category	Code	Title	Credits	Theory Lecture L	Tutorial T	Practical/ Drawing P	Duration in hours	CIE Marks	SEE Marks	Total Marks
1	PCC	BISA501C	Object Oriented Modeling and Design	3	3	0	0	3	50	50	100
2	PCC	BISA502C	Database Management Systems	3	3	0	0	3	50	50	100
3	PEC	BISAXXE	Professional Elective Course – I	3	3	0	0	3	50	50	100
4	OEC	BISAXXN	Open Elective Course - I	3	3	0	0	3	50	50	100
5	HSMC	BBT523C	Environmental Studies	1	1	0	0	1	50	50	100
6	AEC	BHSA522C	Soft Skill	2	2	0	0	2	50	50	100
7	PCCL	BISA5XXL	OOMD Lab	1.5	0	0	3	3	50	50	100
8	PCCL	BISA5XXL	DBMS Lab	1.5	0	0	3	3	50	50	100
9	PROJ.	BISA5XXP	Mini Project	2	0	0	2	3	50	50	100
10	MC	BHSC560M	National Service Scheme	0	0	0	2	0	0	0	0
		BHSB560M	Physical Education(Sports and Athletics)								
		BHSA560M	Yoga								
11		AAP	AICTE Activity Points								
			Total	**20**	**15**	**0**	**10**	**24**	**450**	**450**	**900**

Sem.	BSC	ESC	HSMC	AEC	PCC	PEC	OEC	Proj.	Int.	Total
5			01	2 (SS)	09	03	03	02		20

Department of Information Science and Engineering
6th Semester
Applicable to students admitted in AY 2024-25 to 1st sem and through lateral entry in AY 2025-26 to 3rd sem (4th NEP Batch)

Sl. No.	Course			Credits	Teaching Hours/Week			Examination			
	Category	Code	Title		Theory Lecture	Tutorial	Practical/ Drawing	Duration in hours	CIE Marks	SEE Marks	Total Marks
					L	T	P				
1	PCC	BISA6XXC	Compiler Design	3	3	0	0	3	50	50	100
2	IPCC	BISA6XXC	Computer Networks	3	2	0	2	3	50	50	100
3	PCC	BISA6XXC	Machine Learning	3	3	0	0	3	50	50	100
4	PCCL	BISA6XXL	Machine Learning Laboratory	1	0	0	2	3	50	50	100
5	PCC	BISA6XXC	Information and Network Security	3	3	0	0	3	50	50	100
6	AEC	BUHSXXC	Indian Knowledge Systems	1	1	0	0	1	50	50	100
7	PEC	BISA6XXE	Professional Elective Course - II	3	3	0	0	3	50	50	100
8	OEC	BISA6XXN	Open Elective Course - II	3	3	0	0	3	50	50	100
9	PROJ.	--	Pre-Project Work	0	0	0	0	0	0	0	0
10	MC	BHSC660M	National Service Scheme	0	0	0	2	0	0	0	0
		BHSB660M	Physical Education (Sports and Athletics)								
		BHSA660M	Yoga								
11		AAP	AICTE Activity Points								
			Total	20	18	0	6	22	400	400	800

Note: Pre-Project Work – 1) Batch Formulation, 2) Project Allocation and Guide Allotment, 3) Problem Identification and Formulation, and 4) Literature Survey – Minimum 10 papers are to be surveyed.

Sem.	BSC	ESC	HSSM	AEC	PCC	PEC	OEC	Proj.	Int.	Total
6				01	13	03	03			

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7th Semester
Applicable to students admitted in AY 2024-25 to 1st sem and through lateral entry in AY 2025-26 to 3rd sem (4th NEP Batch)

Sl. No.	Course				Credits	Teaching Hours/Week			Examination			
	Category	Code	Title			Theory Lecture	Tutorial	Practical/ Drawing	Duration in hours	CIE Marks	SEE Marks	Total Marks
						L	T	P				
1	HSMC	BISA7XXC	Research Methodology and IPR		3	3	0	0	3	50	50	100
2	IPCC	BISA7XXC	Big Data Analytics (Integrated)		3	2	0	2	3	50	50	100
3	IPCC	BISA7XXC	Cloud Computing		3	3	0	0	3	50	50	100
4	PEC	BISA7XXE	Professional Elective Course – III		3	3	0	0	3	50	50	100
5	PEC	BISA7XXE	Professional Elective Course - IV		3	3	0	0	3	50	50	100
6	PROJ.	BISA7XXP	Project		9	0	0	9	3	50	50	100
				Total	24	14	0	11	18	300	300	600

Sem.	BSC	ESC	HSMC	AEC	PCC	PEC	OEC	Proj.	Int.	Total
7			03		06	06		09		24

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8th Semester
Applicable to students admitted in AY 2024-25 to 1st sem and through lateral entry in AY 2025-26 to 3rd sem (4th NEP Batch)

Sl. No.	Course				Credits	Teaching Hours/Week			Examination			
	Category	Code	Title			Theory Lecture	Tutorial	Practical/ Drawing	Duration in hours	CIE Marks	SEE Marks	Total Marks
						L	T	P				
1	AEC	BISA8XXX	MOOCS		3	3	0	0	3	50	50	100
2	OEC	BISA8XXX	MOOCS		3	3	0	0	3	50	50	100
3	INT.	BISA8XXX	Internship		10	0	0	10	10	50	50	100
			Total		**16**	**6**	**0**	**10**	**16**	**150**	**150**	**300**

Sem.	BSC	ESC	HSSM	AEC	PCC	PEC	OEC	Proj.	Int.	Total
8				3 (MOOCS)			3 (MOOCS)		10	16