



Autonomous Scheme of Teaching & Examinations (ST&E) (Tentative) UG - BE 3rd Year CSE

SCHEME: 2023

SEM: V

Revision date: 26.05.2025

S. #	Course Type	Course type Series	Course Code	Course Title	Teaching Dept.	QP setting dept	Credits	Teaching Hrs/Week				Examinations				
								L	T	P	O	CIE Marks	SEE (Dur. & Marks)			
								Lecture	Tutorial	Practical	PBL/ABL / SL/etc.		Dur.	Th.	Lab	Tot.
1	PCC	3	23CST501	Computer Networks	CSE	CSE	3	3	0	0		50	03	50	-	100
2	IPCC	5	23CSI502	Software Engineering and Project Management	CSE	CSE	4	3	0	2	@	50	03	50	-	100
3	IPCC	6	23CSI503	Database Management Systems	CSE	CSE	4	3	0	2	@	50	03	50	-	100
4	PCCL	3	23CSL504	Computer Networks Laboratory	CSE	CSE	1	0	0	2		50	03	-	50	100
5	PEC	1	23CSP51y	Professional Elective Course - 1	CSE	CSE	3	3	0	0		50	03	50	-	100
6	ETC	3	23CSE53y	Emerging Technology Course - 3	CSE	CSE	3	3	0	0	@	50	03	50	-	100
7	HSMC	6	23SFHH06/ 23UHVH07	Bioscience or UHV-Universal Human Values	any dept	any dept	1	0	2	0	@	50	02	50	-	100
8	AEC	5	23CSAE5y	Ability Enhancement Course - 5	CSE	CSE	1	1	0	0		50	02	50	-	100
								(or)								
								0	0	2		50	02	-	50	100
9	NCMC	4	23PASN01	Physical Education - Sports and Athletics	PED	PED	PP/NP				2	50	-	-	-	50
			23YOGN02	Yoga	PED	PED										
			23NSSN03	NSS - National Service Scheme	NSS	NSS										
			23NCCN04	NCC - National Cadet Corps	NCC	NCC										
			23IKSN05	Indian Knowledge System	HSS	HSS										
Total							20	16	2	8	2	450		350	100	850

PCC: Professional Course; IPCC: Integrated Professional Core Course; PCCL: Professional Core Course Laboratory; AEC: Ability Enhancement Course; HSMC: Humanities, Social Sciences & Management Course; NCMC: Non Credit Mandatory Course;

{ @ - Compulsory one activity during the semester};

{I.E.-Industry Experts}.

PBL: project Based learning; ABL: Activity Based Learning; SL: Self-Learning

ETC (Emerging Technology Course):

For ETC (L:T:P:O) can be planned by the depts considering practicality & possibility of conduction, same shall be indicated along with course title in the list, if altered than above. If planned altering the prescription, the same shall be approved at the department BOS & authorities. Atleast one activity is mandatory during the delivery of the course. The guidelines is applicable to all the semesters III to VI semesters (ETC-1 to ETC-4).

Bioscience & UHV-Universal Human Values:

- 1) Any one of the course will be offered by the departments in each semester of IV & V based on the institutional planning.
- 2) Both the courses shall be studied and completed by the students registering each in the two semesters. For example, if Bioscience is offered in the IV semester, UHV-Universal Human Values is offered in the V semester.

Ability Enhancement Course-5: 23xxAE5y - 1 Credit course

- 1) The courses and the syllabus shall be defined by the respective dept. BOS.
- 2) SEE will be MCQ if offered as theory course. If offered as LAB course, SEE will be practical, with two internal examiners. Handled by Controller of Examinations.

NCMC (Non Credit Mandatory Course) for course type series-4: Refer to guidelines in III SEM.

Professional Elective Course - 1		Emerging Technology Course - 3		Ability Enhancement Course - 5	
Course Code	Course Title	Course Code	Course Title	Course Code	Course Title
23CSP511	Unix System Programming	23CSE531	Digital Image Processing	23CSAE51	Mobile Application Development
23CSP512	Advanced JAVA	23CSE532	Data Visualization Techniques	23CSAE52	Cloud Computing
23CSP513	Human Computer Interaction	23CSE533	Web Application and Database Security	23CSAE53	DevOps
23CSP514	Advanced Computer Architecture	23CSE534	React JS	23CSAE54	JavaScript



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S. #	Course Type	Course type Series	Course Code	Course Title	Teaching Dept.	QP setting dept	Credits	Teaching Hrs/Week				CIE Marks	Examinations			
								L	T	P	O		SEE (Dur. & Marks)			
								Lecture	Tutorial	Practical	PBL/ABL /SL/etc.		Dur.	Th.	Lab	Tot.
1	PCC	4	23CST601	Artificial Intelligence & Machine Learning	CSE	CSE	3	3	0	0		50	03	50	-	100
2	IPCC	7	23CSI602	Theory of Computation	CSE	CSE	4	3	0	2	@	50	03	50	-	100
3	PCCL	4	23CSL603	Artificial Intelligence & Machine Learning Lab	CSE	CSE	1	0	0	2		50	03	-	50	100
4	PEC	2	23CSP62y	Professional Elective Course - 2	CSE	CSE	3	3	0	0		50	03	50	-	100
5	OEC	1	23CSO61y	Open Elective Course - 1	CSE	CSE	3	3	0	0		50	03	50	-	100
6	ETC	4	23CSE64y	Emerging Technology Course - 4	CSE	CSE	3	3	0	0	@	50	03	50	-	100
7	AEC	6	23RMAE61	Research Methodology & IPR	CSE	CSE	3	3	0	0	@	50	03	50	-	100
8	PRJ	1	23CSPRJ1	Project - Phase I	CSE	CSE	2	0	0	4	@	50	03	-	50	100
9	HSMC	7	23SCRH08	Social Connect & Responsibility	Any dept	Any dept	1	1	0	0	@	50	-	-	-	50
10	NCMC	4	23PASN01	Physical Education - Sports and Athletics	PED	PED	PP/NP				2	50				50
			23YOGN02	Yoga	PED	PED										
			23NSSN03	NSS - National Service Scheme	NSS	NSS										
			23NCCN04	NCC - National Cadet Corps	NCC	NCC										
			23IKSN05	Indian Knowledge System	HSS	HSS										
Total							23	19	0	8	2	500		300	100	900

PCC: Professional Course; IPCC: Integrated Professional Core Course; PCCL: Professional Core Course Laboratory; PEC: Professional Elective Course; OEC: Open Elective Course;

HSMC: Humanities, Social Sciences & Management Course; AEC: Ability Enhancement Course; NCMC: Non Credit Mandatory Course; PRJ: Project work.

{@ - Compulsory one activity during the semester}; {I.E.-Industry Experts}; PBL: project Based learning; ABL: Activity Based Learning; SL: Self-Learning

NOTE: CIE & SEE guidelines for S. #7: AEC-23RMAE61-Reserach Methodology & IPR will be same as 3 credit courses BSC/ESC/PCC/ETC/PEC/OEC as mentioned in serial no. 1 of CIE & SEE guidelines.

Open Elective Courses (OEC):

- 1) Open Electives listed here are to offer for other department students.
- 2) Students shall select open elective courses offered from other departments, separate consolidated list of courses offered from various departments will be published time to time.

ETC (Emerging Technology Course):

For ETC (L:T:P:O) can be planned by the depts considering practicality & possibility of conduction, same shall be indicated along with course title in the list, if altered than above. If planned altering the prescription, the same shall be approved at the department BOS & authorities. Atleast one activity is mandatory during the delivery of the course. The guidelines is applicable to all the semesters III to VI semesters (ETC-1 to ETC-4).

NCMC (Non Credit Mandatory Course) for course type series-4: Refer to guidelines in III SEM.

Professional Elective Course - 2		Open Elective Course - 1		Emerging Technology Course - 4	
Course Code	Course Title	Course Code	Course Title	Course Code	Course Title
23CSP621	C# and .NET	23CSO611	Introduction to Data Structures	23CSE641	Computer Vision
23CSP622	Storage Area Networks	23CSO612	Object-Oriented Programming with JAVA	23CSE642	Big Data Analytics
23CSP623	Process Automation	23CSO613	Software Testing	23CSE643	Cryptography and Network Security
23CSP624	Mobile Computing	23CSO614	Data Visualization using Python	23CSE644	Full Stack Development



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Autonomous Institution affiliated to Visvesvaraya Technological University, Belagavi
Recognized by UGC, New Delhi with 2(f) & 12 (B), Accredited by NAAC with 'A+' grade,
Certified by ISO 9001 - 2015



Autonomous Scheme of Teaching & Examinations (ST&E) (Tentative) UG - BE 4th Year CSE

SCHEME: 2023

SEM: VII

Revision date: 26.05.2025

S. #	Course Type	Course Type Series	Course Code	Course Title	Teaching Dept.	QP setting dept	Credits	Teaching Hrs/Week				CIE Marks	Examinations			
								L	T	P	O		SEE (Dur. & Marks)			
								Lecture	Tutorial	Practical	PBL/ABL / SL/etc.		Dur.	Th.	Lab	Tot.
1	PCC	5	23CST701	Block Chain Technology	CSE	CSE	3	3	0	0		50	03	50	-	100
2	IPCC	8	23CSI702	Generative AI and Prompt Engineering	CSE	CSE	4	3	0	2		50	03	50	-	100
3	PEC	3	23CSP73y	Professional Elective Course - 3	CSE	CSE	3	3	0	0		50	03	50	-	100
4	OEC	2	23CSO72y	Open Elective Course - 2	Any dept.	Any dept.	3	3	0	0		50	03	50	-	100
5	HSMC	7	23CST704	Management and Entrepreneurship	CSE	CSE	2	2	0	0		50	03	50	-	100
6	PRJ	2	23CSPRJ2	Major Project - Phase II			6	0	0	12	@	100	03	-	100	200
Total							21	14	0	14		350		250	100	700

PCC: Professional Core Course; IPCC: Integrated Professional Core Course; PEC: Professional Elective Course; OEC: Open Elective Course; PRJ: Project Work.

PBL: project Based learning; ABL: Activity Based Learning; SL: Self-Learning

Open Elective Courses (OEC):

1) Open Electives listed here are to offer for other department students.

2) Students shall select open elective courses offered from other departments, separate consolidated list of courses offered from various departments will be published time to time.

Professional Elective Course - 3				Open Elective Course - 2			
Course Code	Course Title			Course Code	Course Title		
23CSP731	Complier Design			23CSO721	Unix Programming		
23CSP732	System Modelling and Simulation			23CSO722	Fundamentals of DBMS		
23CSP733	High Performance Computing			23CSO723	Introduction to Cyber Security		
23CSP734	Low-Code/No-Code			23CSO724	Introduction to Artificial Intelligence & Machine Learning		



Autonomous Scheme of Teaching & Examinations (ST&E) (Tentative) UG - BE 4th Year CSE

SCHEME: 2023

SEM: VIII

Revision date: 26.05.2025

S. #	Course Type	Course Type Series	Course Code	Course Title	QP setting dept	Credits	Teaching Hrs/Week				CIE Marks	Examinations			
							L	T	P	O		SEE (Dur. & Marks)			
							Lecture	Tutorial	Practical	PBL/ABL / SL/etc.		Dur.	Th.	Lab	Tot.
1	SLC	1	23CSS1yy	Self-Learning Course - 1 (NPTEL)		3	0	0	0	@	50	-	50	-	100
2	SLC	2	23CSS2yy	Self-Learning Course - 2 (NPTEL)		3	0	0	0	@	50	-	50	-	100
3	INT	1	23CSINT1	Industrial Internship		10				@	100	03	-	100	200
Total						16	0	0	0	0	200		100	100	400

SLC: Self Learning Course; INT: Internship-After 7th SEM exams; SLC courses to be started from 3rd SEM and to be completed by 7th SEM and evaluated and credited in 8th SEM.
PBL: project Based learning; ABL: Activity Based Learning; SL: Self-Learning

Self-Learning Courses (SLC):

- Offering and Registration of Self-learning Courses will commence from 3rd Semester itself and continues till the end of the duration of study.
- Both regular & lateral entry students shall start registering for the self learning courses and complete as per the guidelines published separately. (Refer to the Self Learning Courses guidelines published).
- Calculation of SGPA & CGPA is considered for VIII Semester, irrespective of period or time of completion of the course.

Self-Learning course - 1 (NPTEL) (23xxS1yy)			Self-Learning course - 2 (NPTEL) (23xxS2yy)		
Course Code	Course Title	NPTEL Code	Course Code	Course Title	NPTEL Code
NOTE:					
1) List shall be published separately starting from 3rd SEM itself. (Need not to mention the list here)					
2) The students shall register for NPTEL courses when the lists are announced by the departments & complete as per the guidelines.					