



**SCHEME: 2023**  
**SEM: III**

**Aca. Year.: 2024-25**

**Date: 15/11/2023**

**AUTONOMOUS SCHEME (Tentative) UG - BE 2nd Year Civil**

SL No	Course Type	Course type Count	Course Code	Course Title	Teaching Dept.	QP setting dept	Credits	Teaching Hrs/Week				Examinations				
								L	T	P	S	CIE Marks	SEE			Tot. Marks
								Lecture	Tutorial	Practical	PBL/ABL/SL/others.		Dur.	Th. Mrks	Lab. Mrks.	
1	IBSC	3	23MAI301	Mathematics-III	Maths	Maths	4	2	2	2		50	03	50	-	100
2	PCC	1	23CVT302	Earth Resources Engineering	CV	CV	3	2	2	0		50	03	50	-	100
3	IPCC	1	23CVI303	Building Materials & Construction Technology	CV	CV	4	3	0	2		50	03	50	-	100
4	IPCC	2	23CVI304	Strength of Materials	CV	CV	4	2	2	2		50	03	50	-	100
5	PCCL	1	23CVL305	Computer Aided Building Planning & Drawing	CV	CV	1	0	0	2		50	03	-	50	100
6	ETC	1	23CVE31y	Emerging Technology Course - 1	CV	CV	3	3	0	0		50	03	50	-	100
7	AEC	3	23CVAE31	Skill development Course - 3 (EWD)	I.E.	I.E.	1	1	0	0	3	50	02	50	-	100
8	NMC	3	23PDSN03	Personality Development-3 (HRD Training)	I.E.	I.E.	PP/NP	0	0	0	2	50	-	-	-	50
<b>Total</b>							<b>20</b>	<b>13</b>	<b>6</b>	<b>8</b>	<b>5</b>	<b>400</b>		<b>300</b>	<b>50</b>	<b>750</b>

BSC: Basic Science Course; PCC: Professional Course; IPCC: Integrated Professional Core Course; PCCL: Professional Core Course Laboratory; ETC: Emerging Technology Course; AEC: Ability Enhancement Course; NMC: Non Credit Mandatory Course {I.E.-Industry Experts}

**Note:** For the fulfillment of successful completion of degree, lateral entry students, shall study & complete additional courses of Additional mathematics, Language Courses, Environmental studies, Constitution of India & professional Ethics as per the guidelines released time to time.

Emerging Technology Course - 1	
Course Code	Course Title
23CVE311	Construction Equipment, Plants and Machinery
23CVE312	Environmental Protection and Management
23CVE313	IOT in Civil Engineering
23CVE314	Fire Safety in Buildings

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## AUTONOMOUS SCHEME (Tentative) UG - BE 2nd Year Civil

**SCHEME: 2023**

**Ac. Year.: 2024-25**

**Date: 15/11/2023**

**SEM: IV**

SL No	Course Type	Course type Count	Course Code	Course Title	Teaching Dept.	QP setting dept	Credits	Teaching Hrs/Week				Examinations				
								L	T	P	S	CIE Marks	SEE			Tot. Marks
								Lecture	Tutorial	Practical	PBL/ABL/SL/others.		Dur.	Th. Mrks	Lab. Mrks.	
1	IBSC	4	23MAI401	Mathematicss-IV	Maths	Maths	3	2	0	2		50	03	50	-	100
2	PCC	2	23CVT402	Structural Analysis	CV	CV	3	3	0	0		50	03	50	-	100
3	IPCC	3	23CVI403	Surveying	CV	CV	4	3	0	2		50	03	50	-	100
4	IPCC	4	23CVI404	Fluid Mechanics & Machinery	CV	CV	4	3	0	2		50	03	50	-	100
5	PCCL	2	23CVL405	Earth Resources Engineering Lab	CV	CV	1	0	0	2		50	03	-	50	100
6	ETC	2	23CVE42y	Emerging Technology Course - 2	CV	CV	3	3	0	0		50	03	50	-	100
7	HSMC	5	23SFHH06/ 23UHVH07	SFH or UHV	Any Dept	Any Dept	1	0	2	0	@	50	02	50	-	100
8	AEC	4	23xxAE41	Skill Development Course - 4 (EWDP)	I.E.	I.E.	1	1	0	0	3	50	02	50	-	100
9	NCMC	4	23PASN01	Phy. Education (Phy. Activities & Sports)	PED	PED	PP/NP	-	-	-	2	50	-	-	-	50
			23YOGN02	Yoga	PED	PED										
			23NSSN03	NSS	NSS	NSS										
			23NCCN04	NCC	NCC	NCC										
			23IKSN05	Inidan Knowledge System	HSS	HSS										
10	NCMC	5	23PDSN04	Personality Development-4 (HRD Training)	I.E.	I.E.	PP/NP	0	0	0	2	50	-	-	-	50
<b>Total</b>							<b>20</b>	<b>15</b>	<b>2</b>	<b>8</b>	<b>7</b>	<b>500</b>		<b>350</b>	<b>50</b>	<b>900</b>

BSC: Basic Science Course; PCC: Professional Course; IPCC: Integrated Professional Core Course; PCCL: Professional Core Course Laboratory; ETC: Engineering Technology Course; AEC: Ability Enhancement Course; HSMC: Humanities, Social Sciences & Management Course; NCMC: Non Credit Mandatory Course; {@ - Compulsory one activity during the semester} {\$ - Activity based (2 Hrs/week)} {I.E.-Industry Experts}

Emerging Technology Course - 2	
Course Code	Course Title
23CVE421	Smart Materials in Civil Engineering
23CVE422	Sustainable Design Concept for Building Services
23CVE423	Sustainable Building Materials
23CVE424	Disaster Management

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## AUTONOMOUS SCHEME (Tentative) UG - BE 3rd Year Civil

**SCHEME: 2023**

**Aca. Year.: 2025-26**

**Date: 15/11/2023**

**SEM: V**

SL No	Course Type	Course type Count	Course Code	Course Title	Teaching Dept.	QP setting dept	Credits	Teaching Hrs/Week				Examinations				
								L	T	P	S	CIE Marks	SEE			Tot. Marks
								Lecture	Tutorial	Practical	PBL/ABL/SL/ofhrs.		Dur.	Th. Mrks	Lab. Mrks.	
1	PCC	3	23CVT501	Water & Waste water Engineering	CV	CV	3	3	0	0		50	03	50	-	100
2	IPCC	5	23CVI502	Highway Engineering	CV	CV	4	3	0	2		50	03	50	-	100
3	IPCC	6	23CVI503	Design & Detailing of RC Structural Elements	CV	CV	4	3	0	2		50	03	50	-	100
4	PCCL	3	23CVL504	Software Application Lab	CV	CV	1	0	0	2		50	03	-	50	100
5	PEC	1	23CVP51y	Professional Elective Course - 1	CV	CV	3	3	0	0		50	03	50	-	100
6	ETC	3	23CVE53y	Emerging Technology Course - 3	CV	CV	3	3	0	0		50	03	50	-	100
7	HSMC	6	23SFHH06/ 23UHVH07	SFH or UHV	Any Dept	Any Dept	1	0	2	0	@	50	02	50	-	100
8	AEC	5	23CVAE51	Skill Development Course - 5 (EWDP)	I.E.	I.E.	1	1	0	0	3	50	02	50	-	100
9	NCMC	4	23PASN01	Phy. Education (Phy. Activities & Sports)	PED	PED	NP/PP	-	-	-	2	50	-	-	-	50
			23YOGN02	Yoga	PED	PED										
			23NSSN03	NSS	NSS	NSS										
			23NCCN04	NCC	NCC	NCC										
			23IKSN05	Inidan Knowledge System	HSS	HSS										
10	NCMC	6	23PDSN04	Personality Development-5 (HRD Training)	I.E.	I.E.	PP/NP	0	0	0	2	50	-	-	-	50
<b>Total</b>							<b>20</b>	<b>16</b>	<b>2</b>	<b>6</b>	<b>7</b>	<b>500</b>		<b>350</b>	<b>50</b>	<b>900</b>

PCC: Professional Course; IPCC: Integrated Professional Core Course; PCCL: Professional Core Course Laboratory; ETC: Engineering Technology Course; AEC: Ability Enhancement Course; HSMC: Humanities, Social Sciences & Management Course; NCMC: Non Credit Mandatory Course; {@ - Compulsory one activity during the semester} {\$ - Activity based (2 Hrs/week)} {I.E.-Industry Experts}

Professional Elective Course - 1		Emerging Technology Course - 3	
Course Code	Course Title	Course Code	Course Title
23CVP511	Matrix Methods of Structural Analysis	23CVE531	Pre-Engineered Buildings
23CVP512	Alternate Building Materials	23CVE532	Repair and Rehabilitation of Structures
23CVP513	Environmental Impact Assessment	23CVE533	Rural, Urban Planning and Architecture
23CVP514	Ground Water Hydraulics	23CVE534	Watershed Management

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## AUTONOMOUS SCHEME (Tentative) UG - BE 3rd Year Civil

**SCHEME: 2023**  
**SEM: VI**

**Aca. Year.: 2025-26**

**Date: 15/11/2023**

SL No	Course Type	Course type Count	Course Code	Course Title	Teaching Dept.	QP setting dept	Credits	Teaching Hrs/Week				Examinations				
								L	T	P	S	CIE Marks	SEE			Tot. Marks
								Lecture	Tutorial	Practical	PBL/ABL / SL/others.		Dur.	Th. Mrks	Lab. Mrks	
1	PCC	4	23CVT601	Hydrology & Water Resources Engineering	CV	CV	3	3	0	0		50	03	50	-	100
2	IPCC	7	23CVI602	Geotechnical Engineering	CV	CV	4	3	0	2		50	03	50	-	100
3	PCCL	4	23CVL603	Environmental Engineering Lab	CV	CV	1	0	0	2		50	03	-	50	100
4	PEC	2	23CVP62y	Professional Elective Course - 2	CV	CV	3	3	0	0		50	03	50	-	100
5	OEC	1	23CVO61y	Open Elective Course - 1	CV	CV	3	3	0	0		50	03	50	-	100
6	ETC	4	23CVE64y	Emerging Technology Course - 4	CV	CV	3	2	0	2		50	03	50	-	100
7	AEC	6	23CVAE61	Innovation & Design Thinking	CV	CV	1	0	2	0	@	50	02	50	-	100
8	PRJ	1	23CVPRJ1	Mini Project	CV	CV	2	0	0	4	@	50	03	-	50	100
9	AEC	7	23CVAE62	Skill Development Course - 6 (EWDP)	I.E.	I.E.	1	1	0	0	3	50	02	50	-	100
10	NCMC	7	23PDSN04	Personality Development-6 (HRD Training)	I.E.	I.E.	PP/NP	0	0	0	2	50	-	-	-	50
<b>Total</b>							<b>21</b>	<b>15</b>	<b>2</b>	<b>10</b>	<b>5</b>	<b>500</b>		<b>350</b>	<b>100</b>	<b>950</b>

PCC: Professional Course; IPCC: Integrated Professional Core Course; PCCL: Professional Core Course Laboratory; PEC: Professional Elective Course; OEC: Open Elective Course; ETC: Engineering Technology Course; HSMC: Humanities, Social Sciences & Management Course; AEC: Ability Enhancement Course; {@ - Compulsory one activity during the semester} {I.E.-Industry Experts} {Open Electives listed here are for other department students, stdnts shall select from separate list published}

Professional Elective Course - 2		Open Elective Course - 1		Emerging Technology Course - 4	
Course Code	Course Title	Course Code	Course Title	Course Code	Course Title
23CVP621	Prestressed Concrete	23CVO611	Integrated Building Services	23CVE641	Building Information Modelling in Civil Engineering
23CVP622	Earthquake Resistant Structures	23CVO612	Road Safety and Traffic Engineering	23CVE642	Numerical Methods using MATLAB
23CVP623	Railways, Harbours, Tunnelling and Airports	23CVO613	Green Building	23CVE643	Data Analytics using MS Excel
23CVP624	Solid and Hazardous Waste Management	23CVO614	Climate Change and Sustainability	23CVE644	Geospatial Techniques in Civil Engineering

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## AUTONOMOUS SCHEME (Tentative) UG - BE 4th Year Civil

**SCHEME: 2023**  
**SEM: VII**


**Aca. Year.: 2026-27**


**Date: 15/11/2023**


SL No	Course Type	Course type Count	Course Code	Course Title	Teaching Dept.	QP setting dept	Credits	Teaching Hrs/Week				Examinations				
								L	T	P	S	CIE Marks	SEE			Tot. Marks
								Lecture	Tutorial	Practical	PBL/ABL /SL/others.		Dur.	Th. Mrks	Lab. Mrks	
1	PCC	5	23CVT701	Estimation, Costing & Valuation	CV	CV	3	3	0	0		50	03	50	-	100
2	IPCC	8	23CVI702	Concrete Technology	CV	CV	4	3	0	2		50	03	50	-	100
3	IPCC	9	23CVI703	Design & Detailing of Steel Structural Elements	CV	CV	4	3	0	2		50	03	50	-	100
4	PEC	3	23CVP73y	Professional Elective Course - 3	CV	CV	3	3	0	0		50	03	50	-	100
5	OEC	2	23CVO72y	Open Elective Course - 2	Any Dept.	Any Dept.	3	3	0	0		50	03	50	-	100
6	HSMC	7	23CVT704	Construction Management & Entrepreneurship	CV	CV	2	2	0	0		50	03	50	-	100
7	PRJ	2	23CVPRJ2	Major Project - Phase I	CV	CV	2	0	0	0	@	50	03	-	50	100
<b>Total</b>							<b>21</b>	<b>17</b>	<b>0</b>	<b>6</b>		<b>350</b>		<b>300</b>	<b>50</b>	<b>700</b>

PCC: Professional Core Course; IPCC: Integrated Professional Core Course; PEC: Professional Elective Course; OEC: Open Elective Course; PRJ-P1W: Major Project Phase Wise. {Open Electives listed here are for other department students, stdnts shall select from separate list published}

Professional Elective Course - 3		Open Elective Course - 2	
Course Code	Course Title	Course Code	Course Title
23CVP731	Bridge Engineering	23CVO721	Earthquake Safety Tips
23CVP732	Design of RCC and Steel Structures	23CVO722	Energy Efficiency, Acoustics and Daylighting in Building
23CVP733	Pavement Materials and Design	23CVO723	Remote Sensing & GIS
23CVP734	Applied Geotechnical Engineering	23CVO724	Water conservation and Rainwater Harvesting

  
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**SCHEME: 2023**  
**SEM: VIII**

**AUTONOMOUS SCHEME (Tentative) UG - BE 4th Year Civil**

Aca. Year.: 2026-27

Date: 15/11/2023

SL No	Course Type	Course type Count	Course Code	Course Title	Teaching Dept.	QP setting dept	Credits	Teaching Hrs/Week				CIE Marks	Examinations			
								L	T	P	S		SEE			Tot. Marks
								Lecture	Tutorial		PBL/ABL / SL/others.		Dur.	Th. Mrks	Lab. Mrks	
1	SLC	1	23CVSL1y	Self-Learning Course - 1 (NPTEL)	NPTEL	NPTEL	3	0	0	0	@	50	-	50	-	100
2	SLC	2	23CVSL2y	Self-Learning Course - 2 (NPTEL)	NPTEL	NPTEL	3	0	0	0	@	50	-	50	-	100
3	PRJ	3	23CVPRJ3	Major Project - Phase II	CV	CV	8				@	100	-	-	100	200
4	INT	1	23CVINT1	Industrial Internship			4				@	50	-	-	50	100
<b>Total</b>							<b>18</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>250</b>		<b>100</b>	<b>150</b>	<b>500</b>

SLC: Self Learning Course; Prj-PW: Project Phase Wise; INT: Internship; After 7th SEM exams, full time for Internship & Project equally divided; SLC courses to be started from 3rd SEM and to be completed by 7th SEM and evaluated and credited in 8th SEM.

Self-Learning course - 1 (NPTEL)			Self-Learning course - 2 (NPTEL)		
Course Code	Course Title	NPTEL Code	Course Code	Course Title	NPTEL Code
23CVSL11			23CVSL21		
23CVSL12			23CVSL22		
23CVSL13			23CVSL23		
23CVSL14			23CVSL24		
23CVSL15			23CVSL25		
23CVSL16			23CVSL26		
23CVSL17			23CVSL27		
23CVSL18			23CVSL28		
23CVSL19			23CVSL29		
23CVSL20			23CVSL30		
23CVSL21			23CVSL31		

*Commend*  
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