

**1.2.2_file no: 2-CIVIL ENGINEERING-List Of CBCS Courses
Program Wise(2021-22)**

Programme Code	Programme name	Year of Introduction	Status of implementation of CBCS / ECS (Yes/No)	Year of implementation of CBCS / ECS
1	UG CIVIL ENGINEERING	2015	Yes-Ground improvement techniques	2017
1	UG CIVIL ENGINEERING	2015	Yes- REMOTE SENSING & GIS	2018
1	UG CIVIL ENGINEERING	2015	Yes- ADVANCED STRUCTURAL ENGINEERING	2018
1	UG CIVIL ENGINEERING	2015	Yes-PRE STRESSED CONCRETE	2018
1	UG CIVIL ENGINEERING	2015	Yes- Ground improvement techniques	2018
1	UG CIVIL ENGINEERING	2015	Yes- REMOTE SENSING & GIS	2019
1	UG CIVIL ENGINEERING	2015	Yes- ADVANCED STRUCTURAL ENGINEERING	2019
1	UG CIVIL ENGINEERING	2015	Yes-PRE STRESSED CONCRETE	2019
1	UG CIVIL ENGINEERING	2015	Yes-Ground improvement techniques	2019
1	UG CIVIL ENGINEERING	2015	Yes- REMOTE SENSING & GIS	2020
1	UG CIVIL ENGINEERING	2015	Yes- ADVANCED STRUCTURAL ENGINEERING	2020
1	UG CIVIL ENGINEERING	2015	Yes-PRE STRESSED CONCRETE	2020
1	UG CIVIL ENGINEERING	2015	Yes- REMOTE SENSING & GIS	2020
1	UG CIVIL ENGINEERING	2015	Yes-DISASTER MANAGEMENT	2021
1	UG CIVIL ENGINEERING	2015	Yes- ADVANCED STRUCTURAL ENGINEERING	2021
1	UG CIVIL ENGINEERING	2015	Yes-PRE STRESSED CONCRETE	2021
1	UG CIVIL ENGINEERING	2019	Yes - Building Planning and Bye-laws	2021
1	UG CIVIL ENGINEERING	2019	Yes - Sensor Networks	2021
1	UG CIVIL ENGINEERING	2015	Yes - GIT:Ground improvement techniques	2021
1	UG CIVIL ENGINEERING	2015	Yes - RRS:Rehabilitation and retrofitting of structures	2021
1	UG CIVIL ENGINEERING	2019	Yes - Subsurface investigation and Instrumentation	2022
1	UG CIVIL ENGINEERING	2019	Yes - Managerial Economics & Financial Analysis	2022
1	UG CIVIL ENGINEERING	2015	Yes - Advanced Structural Engineering	2022
1	UG CIVIL ENGINEERING	2015	Yes - Pre Stressed concrete	2022
20	ME STRUCTURAL ENGINEERING	2019	Yes - Advanced Concrete Materials and Technology	2021
20	ME STRUCTURAL ENGINEERING	2019	Yes - Energy Efficient Buildings	2021
20	ME STRUCTURAL ENGINEERING	2019	Yes - English for Research Paper Writing	2021
20	ME STRUCTURAL ENGINEERING	2019	Yes - Design of Advanced Concrete Structures	2022
20	ME STRUCTURAL ENGINEERING	2019	Yes - Design of Pre-stressed Concrete Structures	2022
20	ME STRUCTURAL ENGINEERING	2019	Yes - Design of Industrial Structures	2021
20	ME STRUCTURAL ENGINEERING	2019	Yes - Project Management	2021

Course structure for Four Year Regular B.Tech. Degree Program
(Effective for the batches admitted from 2020-21)
CIVIL ENGINEERING (CE)

Semester II (First year)

Sl. No.	Category	Course Code	Course Title	Hours per week				Credits	Scheme of Examination (Max. Marks)		
				L	T	P	C		CIE	SEE	Total
1	Basic Science courses	20ABS9906	Differential Equations and Vector Calculus	3	0	0	3	30	70	100	
2	Basic Science courses	20ABS9903	Engineering Physics	3	0	0	3	30	70	100	
3	Engineering Science Courses	20AES0202	Basics of Electrical and Electronics Engineering	3	0	0	3	30	70	100	
4	Engineering Science Courses	20AES0509	Basics of Python Programming	3	0	0	3	30	70	100	
5	Engineering Science Courses	20AES0301	Engineering Graphics	1	0	4	3	30	70	100	
6	Engineering Science Courses (LAB)	20AES0204	Basics of Electrical and Electronics Engineering Lab	0	0	3	1.5	30	70	100	
7	Basic Science course (LAB)	20ABS9908	Engineering Physics Lab	0	0	3	1.5	30	70	100	
8	Engineering Science Courses (LAB)	20AES0510	Basics of Python Programming Lab	0	0	3	1.5	30	70	100	
9	Mandatory course (AICTE suggested)	20AMC9902	Constitution of India	2	0	0	0	30	-	30	
Total credits								19.5	270	560	830

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Semester III (Second year)

Sl. No.	Category	Course Code	Course Title	Hours per week				Credits	Scheme of Examination (Max. Marks)		
				L	T	P	C		CI	SEE	Total
1	Basic Science courses	20ABS9913	Probability & Statistics, Partial differential equations	3	0	0	3	30	70	100	
2	Professional core course	20APC0101	Mechanics of Materials	3	0	0	3	30	70	100	
3	Professional core course	20APC0102	Surveying	3	0	0	3	30	70	100	
4	Professional core course	20APC0103	Fluid Mechanics	3	0	0	3	30	70	100	
5	Humanities and social science	20AHSMB01	Managerial Economics and Financial Analysis	3	0	0	3	30	70	100	
6	Professional core courses (LAB)	20APC0104	Strength of Materials Lab	0	0	3	1.5	30	70	100	
7	Professional core courses (LAB)	20APC0105	Surveying Lab	0	0	3	1.5	30	70	100	
8	Professional core courses (LAB)	20APC0106	Fluid Mechanics Lab	0	0	3	1.5	30	70	100	
9	Skill Oriented Course*	20APC0107	Basics of CAD	1	0	2	2	100	-	100	
10	Mandatory course (AICTE suggested)	20AMC9903	Environmental Studies	2	0	0	0	30	-	30	
Total credits								21.5	370	560	930

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Semester IV (Second year)

Sl. No.	Category	Course Code	Course Title	Hours per week				Credits	Scheme of Examination (Max. Marks)		
				L	T	P	C		CUE	SEE	Total
1	Basic Science courses	20ABS9922	Mathematical Modelling and optimization techniques	3	0	0	3	30	70	100	
2	Professional core course	20APC0108	Strength of Materials	3	0	0	3	30	70	100	
3	Professional core course	20APC0109	Hydraulic Engineering	3	0	0	3	30	70	100	
4	Professional core course	20APC0110	Structural Analysis-I	3	0	0	3	30	70	100	
5	Professional core course	20APC0111	Concrete Technology	3	0	0	3	30	70	100	
6	Humanity Science Courses	20AHS9905	Universal Human Values	3	1	0	3	30	70	100	
7	Professional core courses (LAB)	20APC0112	Hydraulic Machinery Lab	0	0	3	1.5	30	70	100	
8	Professional core courses (LAB)	20APC0113	Concrete Technology Lab	0	0	3	1.5	30	70	100	
9	Professional core courses (LAB)	20APC0114	Computer-aided Civil Engineering Drawing Lab	0	0	3	1.5	30	70	100	
10	Skill Oriented Course*	20APC0115	Land survey with 2D drafting /Soft skills	1	0	2	2	100	-	100	
Total credits							24.5	370	630	1000	
Internship (Mandatory) 2 Months during summer vacation											
Honors/ Minor courses (The hours distribution can be 3-0-2 or 3-1-0 also)				4	0	0	4	30	70	100	

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Semester V (third year)

Sl. No.	Category	Course Code	Course Title	Hours per week				Credits	Scheme of Examination (Max. Marks)		
				L	T	P	C		CIE	SEE	Total
1	Professional core course	20APC0116	Soil Mechanics	3	0	0	3	30	70	100	
2	Professional core course	20APC0117	Building Technology	3	0	0	3	30	70	100	
3	Professional core course	20APC0118	Engineering Geology	3	0	0	3	30	70	100	
4	Open Elective course / Job Oriented Elective	20APE0417	Sensor Networks								
		20APC0323	Operations Research	3	0	0	3	30	70	100	
		20AOE0301	Management Science								
5	Professional Elective courses	20APE0101	Structural Analysis-II								
		20APE0102	Water Harvesting and Conservation	3	0	0	3	30	70	100	
		20APE0103	Cost Effective Housing Techniques								
6	Professional core courses (LAB)	20APC0119	Soil Mechanics Lab	0	0	3	1.5	30	70	100	
7	Professional core courses (LAB)	20APC0120	Engineering Geology Lab	0	0	3	1.5	30	70	100	
8	Skill Oriented Course*	20APC0121	Building planning & Drawing Lab	1	0	2	2	100	-	100	
9	Mandatory course (AICTE suggested)		Professional Ethics and Human Values	2	0	0	0	30	-	30	
	Summer Internship 2 months (Mandatory) after second Year (to be evaluated during V semester)			0	0	0	1.5	50	-	50	
	Total credits						21.5	390	490	880	
	Honors/ Minor courses (The hours distribution can be 3-0-2 or 3-1-0 also)			4	0	0	4	30	70	100	

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