

Bachelor of Technology in Civil Engineering

Semester I		
S No	Course Code	Course Title
1	26BTAL11C01	Applied Physics
2	26BTAL11C02	Applied Physics Lab
3	26BTAL11C03	Programming Concepts
4	26BTAL11C04	Programming Concepts Lab
5	26BTAL11C05	Engineering Mathematics-I
6	26BTAL11C06	Workshop Practices
7	26DOAS0VAC1	Environmental Studies
8	26ENGL0AEC1	Communicative English- I
9	26ETPM0VAC1	Entrepreneurship Mindset – I *
10	26BTCN11E01	Open Source Technology
11	26BTCN11E02	Open Source Technology Lab

* Entrepreneurship Mindset-I shall be delivered through blended and self-paced learning approaches, supported by experiential learning, mentoring, startup-oriented activities, and innovation practices.

MOOC (Massive Open Online Course) shall be included to enhance student learning through self-paced, industry-relevant content from recognized platforms such as NPTEL, SWAYAM.

SEMESTER II		
S No	Course Code	Course Title
1	26BTAL12C01	Applied Chemistry
2	26BTAL12C02	Applied Chemistry Lab
3	26BTAL12C03	Basics of Electrical and Electronics Engineering
4	26BTAL12C04	Basics of Electrical and Electronics Engineering Lab
5	26BTAL12C05	Engineering Mathematics- II
6	26BTAL12C06	Engineering Drawing
7	26UHVU0VAC1	Universal Human Value
8	26ENGL0AEC02	Communicative English II
9	26ETPM0VAC2	Entrepreneurship Mindset - II*
10	26BTCN12E01	Python Programming
11	26BTCN12E02	Python Programming Lab

* Entrepreneurship Mindset-II shall be delivered through blended and self-paced learning approaches, supported by experiential learning, mentoring, startup-oriented activities, and innovation practices.

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Semester III		
S No	Course Code	Course Title
1	26BTCE23C01	Strength Of Materials
2	26BTCE23C02	Strength Of Material Lab
3	26BTCE23C03	Fluid Mechanics
4	26BTCE23C04	Fluid Mechanics Lab
5	26BTCE23C05	Building Materials and Construction
6	26BTCE23C06	Surveying & Geomatics
7	26BTCE23C07	Surveying & Geomatics Lab
8	26BTCE23C08	Numerical Methods in Civil Engineering
9	26ASUG0AEC3	Analytical Skills I
10	26ETPM0VAC3	Entrepreneurship Mindset - III*

* Entrepreneurship Mindset-III shall be delivered through blended and self-paced learning approaches, supported by experiential learning, mentoring, startup-oriented activities, and innovation practices.

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Semester IV		
S No	Course Code	Course Title
1	26BTCE24C01	Structural Analysis-I
2	26BTCE24C02	Structural Analysis Lab
3	26BTCE24C03	Design of Reinforced Concrete Structures-I
4	26BTCE24C04	Concrete Technology Lab
5	26BTCE24C05	Reinforced Concrete Drawing I (Using CAD)
6	26BTCE24C06	Irrigation Engineering
7	26BTCE24C07	Construction Planning & Management
8	26ASUG0AEC4	Analytical Skills II
9	26ETPM0VAC4	Entrepreneurship Mindset - IV*
10	26SMEW0AEC1	Stress Management and Emotional Wellness
Optional to choose (Open Elective Basket)*		
11		Learn One More-Bharatiya Bhasha* Or Foreign Languages*

Learn One More Bharatiya Bhasha / Modern Indian Languages courses are optional. Students opting for these courses will earn 1 additional credit.

* **Entrepreneurship Mindset-IV** shall be delivered through blended and self-paced learning approaches, supported by experiential learning, mentoring, startup-oriented activities, and innovation practices.

MOOC (Massive Open Online Course) shall be included to enhance student learning through self-paced, industry-relevant content from recognized platforms such as NPTEL, SWAYAM.

NOTE: All students have to undergo Survey Camp for a week in 4th semester & it will be evaluated in 5th semester.

Open Elective Basket			
S. no	CourseCode	CourseTitle	Type
1	26BFRN0AEC	Basic French	Foreign Languages
2	26BKOR0AEC1	Basic Korean	
3	26BSPA0AEC1	Basic Spanish	
4	26BHIN0AEC1	Basic Hindi	Learn-One-More-Bharatiya-Bhasha
5	26BPUN0AEC1	Basic Punjabi	
6	26BURD0AEC1	BasicUrdu	

Semester V		
S No	Course Code	Course Title
1	26BTCE35C01	Design of Reinforced Concrete Structure-II
2	26BTCE35C02	Reinforced Concrete Drawing- II (Using CAD)
3	26BTCE35C03	Transportation Engineering
4	26BTCE35C04	Transportation Engineering Lab
5	26BTCE35C05	Environmental Engineering
6	26BTCE35C06	Survey Camp
7		Discipline Elective-I
8		Discipline Elective-II
9	26ETPM0VAC5	Entrepreneurship Mindset - V*

* **Entrepreneurship Mindset-V** shall be delivered through blended and self-paced learning approaches, supported by experiential learning, mentoring, startup-oriented activities, and innovation practices.

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Basket – I		
Departmental / Discipline Elective I		
S No	Course Code	Course Title
1	26BTCE35E01	Railway & Airport Engineering
2	26BTCE35E02	Engineering Geology and Rock Mechanics
3	26BTCE35E03	Project Safety Management
4	26BTCE35E04	Building Services
5	26BTCE35E05	Ground Improvement Techniques

Basket – II		
Departmental / Discipline Elective II		
S No	Course Code	Course Title
1	26BTCE35E06	Bridge Engineering
2	26BTCE35E07	Repair and Rehabilitation of Structures
3	26BTCE35E08	Remote Sensing and GIS
4	26BTCE35E09	Advanced Structural Analysis
5	26BTCE35E10	Advanced Concrete Technology

Semester VI		
S No	Course Code	Course Title
1	26BTCE36C01	Structural Analysis-II
2	26BTCE36C02	Geotechnical Engineering
3	26BTCE36C03	Geotechnical Engineering Lab
4	26BTCE36C04	Design of Steel Structures-I
5	26BTCE36C05	Analysis and Design Lab (STAAD PRO)
6		Discipline Elective – III
7		Discipline Elective – IV
8	26ETPM0VAC6	Entrepreneurship Mindset - VI*
9	26BTCE36C06	Research Methodology
Optional to choose (Non-Credit Course)		
10	26PRDV0AEC1	Professional Development –I*

NOTE: All students have to undergo Industrial training of 6 weeks after 6th semester & it will be evaluated in 7th semester.

MOOC (Massive Open Online Course) shall be included to enhance student learning through self-paced, industry-relevant content from recognized platforms such as NPTEL, SWAYAM.

*** Entrepreneurship Mindset- VI shall be delivered through blended and self-paced learning approaches, supported by experiential learning, mentoring, startup-oriented activities, and innovation practices.**

*** Professional Development–I is an optional, non-credit course. Evaluation shall be on a Satisfactory/Unsatisfactory basis.**

Basket – III		
Departmental / Discipline Elective III		
S No	Course Code	Course Title
1	26BTCE36E01	Advance Environmental Engineering
2	26BTCE36E02	Hydrology and Dams
3	26BTCE36E03	Prestressed Concrete
4	26BTCE36E04	Pavement Materials
5	26BTCE36E05	Environmental Impact Assessment

Basket – IV		
Departmental / Discipline Elective IV		
S No	Course Code	Course Title
1	26BTCE36E06	Metro system and Engineering
2	26BTCE36E07	Solid and Hazardous Waste Management
3	26BTCE36E08	Contract Management
4	26BTCE36E09	Soil Dynamics and Machine Foundation
5	26BTCE36E10	Foundation engineering

SEMESTER VII		
S No	Course Code	Course Title
1	26BTCE47C01	Introduction to Engineering Seismology
2	26BTCE47C02	Design of Steel Structures– II
3	26BTCE47C03	Engineering Estimation & Costing
4	26BTCE47C04	Capstone Project
5		Discipline Elective – V
6		Discipline Elective – VI
7	26BTCE47C06	Industrial Training
Optional to choose (Non-Credit Course)		
10	26PRDV0AEC2	Professional Development –II*

* Professional Development–II is an optional, non-credit course. Evaluation shall be on a Satisfactory/Unsatisfactory basis.

MOOC (Massive Open Online Course) shall be included to enhance student learning through self-paced, industry-relevant content from recognized platforms such as NPTEL, SWAYAM.

Basket – V		
Departmental / Discipline Elective V		
S No	Course Code	Course Title
1	26BTCE47E01	Pavement Design
2	26BTCE47E02	Intelligent Transportation Systems
3	26BTCE47E03	Infrastructure Planning and Design
4	26BTCE47E04	Dynamics of Structures
5	26BTCE47E05	Air Quality Control and Engineering

Basket – IV		
Departmental / Discipline Elective IV		
S No	Course Code	Course Title
1	26BTCE47E06	Finite Element Method
2	26BTCE47E07	Traffic Engineering
3	26BTCE47E08	Infrastructure Development and Management
4	26BTCE47E09	Design of Hydraulic structures
5	26BTCE47E10	Solid and Hazardous Waste Management

SEMESTER VIII		
S No	Course Code	Course Title
1	25BTCE48C01	Industrial Training