

# DEPARTMENT OF CIVIL ENGINEERING

	COURSE PL	AN - PART I		
Name of the programme and specialization	B.TECH. CIVIL ENGINEERING			
Course Title	INTRODUCTION TO CIVIL ENGINEERING			
Course Code	CEIR15	No. of Credits	2	
Course Code of Pre- requisite subject(s)	NIL			
Session	July <u>2022</u>	Section (if, applicable)	Α	
Name of Faculty	DR. K. BASKAR	Department	CIVIL ENGINEERING	
Official Email	kbaskar@nitt.edu	Telephone No.	2503161	
Name of Course Coordinator(s) (if, applicable)				
Official E-mail		Telephone No.		
Course Type (please tick appropriately)	X INSTITUTE REC			

#### Syllabus (approved in Senate)

Role of Civil engineers in society, Ethics in Civil Engineering Practice, outstanding accomplishments of the profession, future trends, Types of projects, stages of projects, Specifications and Scope.

State of the art lectures on Structures, Transportation, Water Resources, Environment, Geotechnical and GIS / GPS / RS. Introduction to Engineering geology and seismology.

Properties and uses of construction materials such as stones, bricks, cement, concrete and steel.

Site selection for buildings – components of building foundation – shallow and deep foundations – brick and stone masonry – plastering – lintels, beams and columns – roofs.

#### **COURSE OBJECTIVES**

- 1. To motivate the students in the studies related to civil Engineering
- 2. To familiarize the students in the different fields of Civil Engineering.
- 3. To make the students realize the role of Civil Engineers in Infrastructure Development.
- 4. To make the students understand the state-of-the-art methodologies in Civil Engineering
- 5. To familiarise the various components of buildings and infrastructural projects

#### **COURSE OUTCOMES (CO)**

At the end of the course, the students will have a broad understanding of the State of the art in various disciplines of Civil Engineering. They are also introduced to the fundamentals of buildings and construction materials.



MAPPING OF COs with POs			
Course Outcomes: On completion of the course, the students will be:		Programme Outcomes (PO) (Enter Numbers only)	
1.	To motivate the students in the studies related to civil Engineering	6 7, 8, 9, 11, 12	
2.	To familiarize the students in the different fields of Civil Engineering.	6 7, 8, 9, 11, 12	
3.	To make the students realize the role of Civil Engineers in Infrastructure Development.	6 7, 8, 9, 11, 12	
4.	To make the students understand the state-of-the-art methodologies in Civil Engineering	6 7, 8, 9, 11, 12	
5.	To familiarise the various components of buildings and infrastructural projects	6 7, 8, 9, 11, 12	

# COURSE PLAN - PART II

### **COURSE OVERVIEW**

This course will introduce the Basics of Civil Engineering including, historical development, projects and technology employed over the years, latest trends, various specializations, opportunities in terms of research, higher studies, private, public sector employments, basics of various components of civil engineering

# COURSE TEACHING AND LEARNING ACTIVITIES (Add more rows)

S.No.	Week/Cont act Hours	Topic	Mode of Delivery
1	8	Role of civil engineers in society, Ethics in Civil Engineering Practise, outstanding accomplishments of the profession, future trends.	Chalk and Board, PPT and other softcopy of course materials.
2	8	Opportunities in Civil Engineering, Types of projects, stages of projects, specification and scope.	Chalk and Board, PPT and other softcopy of course materials.
3	8	State of the art lectures on structures, transportation, Water resources, Environment, Geotechnical and GIS/GPS/RS.	Chalk and Board, PPT and other softcopy of course materials.
4	8	Introduction to Engineering Geology and seismology. Properties and uses of construction materials such as stones, bricks, cement, cement, concrete, and steel.	Chalk and Board, PPT and other softcopy of course materials.
5	8	Site selection for buildings-components of building foundation- shallow and deep foundations-brick and stone masonry-plastering-lintels, beams and columns-roofs.	Chalk and Board, PPT and other softcopy of course materials.



No.	Mode of Assessment	Week/Date	Duration	% Weightage
1 Assignments		Continuous	NA	20
2	Assessment-1	End of chapter 1&2 -5 <sup>th</sup> or 6 <sup>th</sup> week	1 hours	20
3	Assessment-2	End of chapter 3&4, 10 <sup>th</sup> or 11 <sup>th</sup> week	1 hours	20
СРА	Compensation Assessment*	13 <sup>th</sup> week	1 hour	20
4	Final Assessment*	As per Institute Schedule	2 hours	40

#### \*mandatory;

#### **COURSE EXIT SURVEY**

course feedback will be collected from students and will be evaluated to re-design the course.

#### COURSE POLICY (including compensation assessment to be specified)

- 1. Assessment-1, 2, 3, and 4 are compulsory.
- Only for genuine cases (with prior information and approval) Compensation Assessment will be conducted.
- 3. Institute Norms will be followed for fixing pass marks

### ATTENDANCE POLICY (A uniform attendance policy as specified below shall be followed)

- > At least 75% attendance in each course is mandatory.
- A maximum of 10% shall be allowed under On Duty (OD) category.
- > Students with less than 65% of attendance shall be prevented from writing the final assessment and shall be awarded 'V' grade.

### **ACADEMIC DISHONESTY & PLAGIARISM**

- Possessing a mobile phone, carrying bits of paper, talking to other students, copying from others during an assessment will be treated as punishable dishonesty.
- > Zero mark to be awarded for the offenders. For copying from another student, both students get the same penalty of zero mark.



- The departmental disciplinary committee including the course faculty member, PAC chairperson and the HoD, as members shall verify the facts of the malpractice and award the punishment if the student is found guilty. The report shall be submitted to the Academic office.
- > The above policy against academic dishonesty shall be applicable for all the programmes.

## ADDITIONAL INFORMATION, IF ANY

#### **Text Books**

- 1. Sushil Kumar, Building construction, Standard Publisher, 2001
- Rangwala S.C, Building materials Charotar Publishing House Pvt. Limited Edition 27, 2009

#### Reference books

- 3. Subinay Gangopadhyay, Engineering Geology, Oxford University Press, 2013
- 4. M. S. Palanichamy, Basic Civil Engineering, Tata Mc Graw Hill, 2000.
- 5. Lecture Notes Prepared by Civil Engineering Department, NIT-T.
- The Course instructor would be available for discussions, if any, during office hours, at Room No:C7; Civil Dept.
- Students are free to post any queries or clarifications to kbaskar@nitt.edu.

FOR APPROVAL

Dr. K. Baskar

Course Faculty

\_CC- Chairperson \_

Dr. R. Senthilkumar

HOD

Dr. S. T. Ramesh

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