

civil



NATIONAL INSTITUTE OF TECHNOLOGY, TIRUCHIRAPPALLI

DEPARTMENT OF CIVIL ENGINEERING

	COURSE PLA	N – PART I	
Name of the programme and specialization	B.Tech. (Electrical and	Electronics Engineerir	ng)
Course Title	Basics of Civil Enginee	ring	м. ж. н. :
Course Code	CEIR 11	No. of Credits	2
Course Code of Pre- requisite subject(s)			
Session	July 2023	Section (if, applicable)	В
Name of Faculty	Mr. M. Swaminathan	Department	Civil Engineering
Official Email	403121008@nitt.edu	Telephone No.	9841186276
Name of Course mentor(s)	Dr. S. Marisamynathar		
Official E-mail	marisamy@nitt.edu	Telephone No.	04312503153
Course Type (please tick appropriately)	Core course	Elective cou	IFSE
tick appropriately)			

Syllabus (approved in BoS)

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

Site selection for buildings - Component of building - Foundation- Shallow and deep foundations - Brick and stone masonry - Plastering - Lintels, beams and columns - Roofs.

Roads-Classification of Rural and urban Roads- Pavement Materials-Traffic signs and road Marking-Traffic Signals.

Surveying - Classification-Chain Survey-Ranging-Compass Survey-exhibition of different survey equipment.

Sources of Water - Dams- Water Supply-Quality of Water-Wastewater Treatment – Sea Water Intrusion – Recharge of Ground Water.

COURSE OBJECTIVES

1. To give an overview of the fundamentals of the Civil Engineering fields to the students of all branches of Engineering

2. To realize the importance of the Civil Engineering Profession in fulfilling societal needs



Course Outcomes Aligned Programme Outcomes (PO)						Programme specific Outcomes (PSO)										
On completion of the course, the students will be able to:		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
1.	The students will gain knowledge on site selection.	3		1	2				1		T		-		2	10
2.	The students will gain knowledge on construction materials.	3		1	2		-		1		2	-			2	
3.	The students will gain knowledge on components of buildings.	3		1	2				1	2		. 17				
4.	The students will gain knowledge on roads and water resources.	3		1	2	- 8			1	2	2		ا دو م	2	-	- 16
5.	A basic appreciation of multidisciplinary approach when involved in Civil Related Projects.	3		- 2	2				1	2	2				2	

COURSE OVERVIEW

COURSE PLAN – PART II

The students gain basic knowledge on civil engineering specialization such as construction materials, techniques, transportation, water resources and surveying.

COURSE TEACHING AND LEARNING ACTIVITIES

S.No.	Week/Conta ct Hours	Торіс	Mode of Delivery
1.	Week 1	Sources of Water – Dams, Water Supply, Quality of Water	
2.	Week 2	Wastewater Treatment	1 3
3.	Week 3	Sea Water Intrusion, Recharge of Ground Water	
4.	Week 4	Surveying - Classification- Chain Survey	PPT, Videos, Board and Chalk
5.	Week 5	Compass Survey (Methods of using, Bearing, Local attraction)	
6.	Week 6	Roads-Classification of Rural and urban Roads, Pavement Materials	2.
7.	Week 8	Traffic signs and road marking-Traffic Signals Mid Semester	



8.	Week 9	Properties and uses of construction materials – stones, bricks	
9.	Week 10	Properties and uses of construction materials – cement, steel	
10.	Week 11	Properties and uses of construction materials – concrete	
11.	Week 12	Site selection for buildings – (Classification and Planning of buildings), Components of building	
12.	Week 13	Foundation- Shallow and deep foundations – (Function, Loads, Bearing Capacity of Soil, Types,	
13.	Week 14	Causes of failure of foundation) Brick and stone masonry – (Definitions, Bonds, Comparison, Points to be observed in construction, Plastering Lintels, beams and columns	
14.	Week 15	Roofs – (Requirement, Classification, Types, roof coverings) Quiz	

COURSE ASSESSMENT METHODS

S.No.	Mode of Assessment	Week/Date	Duration	% Weightage
1	Mid Semster	Week 8	90 Min	30%
2	Quiz	Week 15	20 Min	10%
3	Assignements	-	an a	10%
СРА	Compensation Assessment*	 	90 Min	30%
4	Final Assessment *	Week 17	3 Hrs	50%

*mandatory; refer to guidelines on page 4

COURSE EXIT SURVEY (mention the ways in which the feedback about the course shall be assessed)

It is proposed to take feedback from the students, at the end of the semester to evaluate the execution of the course.

COURSE POLICY (including compensation assessment to be specified)

- a) Students who have missed the mid semester can register for C which shall be conducted soon after the completion of the all portions. Other students were strictly NOT allowed to register for compensation assessment.
- b) Students should submit assignments before last date of submission. In case students fails to submit their assignments, he/she will get zero mark for that particular assignment.
- c) Students need to submit a valid explanation of their absence in their internal assessment.

d) Passing criteria: 35% or (Class average/2) whichever is greater.



MODE OF CORRESPONDENCE (email/ phone etc)

Mode of Correspondence would be through phone/Email only to the Class Representatives and Vice Versa.

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

Queries, if any, can be emailed to the Course faculty directly at 403121008@nitt.edu

FOR APPROVAL 109/2 HOD CC- Chairperson **Course Faculty**



Guidelines

- a) The number of assessments for any theory course shall range from 4 to 6.
- b) Every theory course shall have a final assessment on the entire syllabus with at least 30% weightage.
- c) One compensation assessment for absentees in assessments (other than final assessment) is mandatory. Only genuine cases of absence shall be considered.
- d) The passing minimum shall be as per the regulations.

	B.Tech. /	Admitted in		P.G.
2018	2017	2016	2015	
35% or (Clas whichever is		(Peak/3) or (C whichever is lo	lass Average/2) wer	40%

- e) Attendance policy and the policy on academic dishonesty & plagiarism by students are uniform for all the courses.
- f) Absolute grading policy shall be incorporated if the number of students per course is less than 10.
- g) Necessary care shall be taken to ensure that the course plan is reasonable and is objective.