Civil-3150

NATIONAL INSTITUTE OF TECHNOLOGY, TIRUCHIRAPPALLI

DEPARTMENT OF CHEMICAL ENGINEERING

COURSE PLAN – PART I			
Name of the programme and specialization	B.Tech, Electrical & Electronics Engineering		
Course Title	Basics of Civil Engineering		
Course Code	CEIR11	No. of Credits	2
Course Code of Pre-requisite subject(s)			
Session	Summer 2022	Section (if, applicable)	
Name of Faculty	Dr. Greegar George	Department	Civil Engineering
Official Email	greegar@nitt.edu	Telephone No.	9483742674
Name of Course Coordinator(s) (if, applicable)			
Official E-mail		Telephone No.	
Course Type (please tick appropriately)	[T] Core course	[ ] Elective course	

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.

MAPPING OF COs with POs

Course Outcomes	Programme

	Outcomes (PO) (Enter Numbers only)
1. The students will gain knowledge on site selection	**1, 3, 4, 8**
2. The students will gain knowledge on construction materials.	**1, 3, 4, 8, 10**
3. The students will gain knowledge on components of buildings.	**1, 3, 4, 8, 9**
4. The students will gain knowledge on roads and water resources.	**1, 3, 4, 8, 9, 10**
5. A basic appreciation of multidisciplinary approach when involved in Civil Related Projects.	**1, 4, 8, 9, 10**

COURSE PLAN – PART II

COURSE OVERVIEW

- This course gives students the knowledge about the fundamentals of Civil Engineering such as properties and uses of construction materials, building construction, construction of roads, surveying methods and equipment, water resources and waste water related concepts
- This is a 2 Credit course offered to all branches of engineering except Civil Engineering

COURSE TEACHING AND LEARNING ACTIVITIES (Add more rows)

S.No.	Week/Contact Hours	Topic	Mode of Delivery
1	Week 1	Properties and uses of construction materials – Stones- (Quality, Quarrying, Dressing, Uses)	PPT / Digital writing board (Online)
2	Week 1	Properties and uses of construction materials – Bricks (Manufacture, Quality, Classification, Uses)	PPT / Digital writing board (Online)
3	Week 1	Properties and uses of construction materials – Cement – (Constituents, Manufacture, Properties, Uses, Types)	PPT / Digital writing board (Online)
4	Week 2	Properties and uses of construction materials – Concrete – (Advantages, Constituents, Properties, Proportioning, Manufacture and Types, Uses)	PPT / Digital writing board (Online)
5	Week 2	Properties and uses of construction materials – Steel – (Varieties, Properties and Uses, Commercial forms)	PPT / Digital writing board (Online)
6	Week 2	Site selection for buildings - Component of building - Foundation- Shallow and deep foundations	PPT / Digital writing board (Online)

7	Week 2	Brick and stone masonry - Plastering - Lintels, beams and columns - Roofs	PPT / Digital writing board (Online)
8	Week 3	Roads-Classification of Rural and urban Roads- Pavement Materials	PPT / Digital writing board (Online)
9	Week 3	Traffic signs and road Marking-Traffic Signals	PPT / Digital writing board (Online)
10	Week 3	Surveying - Classification-Chain Survey-Ranging-Compass Survey	PPT / Digital writing board (Online)
11	Week 4	Exhibition of different survey equipment	PPT / Digital writing board (Online)
12	Week 4	Sources of Water - Dams- Water Supply-Quality of Water-Wastewater Treatment	PPT / Digital writing board (Online)
13	Week 4	Sea Water Intrusion – Recharge of Ground Water	PPT / Digital writing board (Online)

COURSE ASSESSMENT METHODS (shall range from 4 to 6)

S.No.	Mode of Assessment	Week/Date	Duration	% Weightage
1	Assessment 1	End of 2nd Week	1 hour	15
2	Assessment 2	End of 3rd Week	1 hour	15
3	Assignments - Two	As per deadlines announced in class	Assignments are to be submitted with in 1 week duration	20
4	Quizzes			20
5	Final Assessment *	End of 4th Week	2 hours	30

***mandatory; refer to guidelines on page 4**

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

1. Feedback from students during Class committee meetings
2. Anonymous feedback through questionnaire at the end of the semester (through the feedback section portal in "mis")

COURSE POLICY (including compensation assessment to be specified)

1. The closing date of attendance for the subject is 30-06-2022.
2. 100 % attendance is desirable for every student, minimum being 75%.
3. Attendance during each assessment is mandatory.
4. Submission of assignments as per schedule is compulsory.
5. Compensation assessment will not be provided since this course is a summer redo.

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

1. The faculty is available for consultation during office hours at room number 204 of Department of Civil Engineering.
2. Queries if any can also be emailed to the faculty or through MS Teams.

FOR APPROVAL

Dr Greegar George

Course Faculty _____ **CC- Chairperson** _____ **HOD** _____

Dr. Greegar George
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Tiruchirappalli - 620 015

विभाग प्रमुख / Head of The Department
सिविल व इलेक्ट्रिकल अभियांत्रिकी विभाग / Department of Electrical And Electronics Engineering
राष्ट्रीय प्रौद्योगिकी संस्थान / National Institute of Technology
तिरुचिरापल्ली - 620 015 / Tiruchirappalli - 620 015
तमिलनाडु, भारत / TamilNadu, INDIA

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 (Class average/2) whichever is greater.		(Peak/3) or (Class Average/2) whichever is lower		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.