Department of Civil Engineering

NATIONAL INSTITUTE OF TECHNOLOGY, TIRUCHIRAPPALLI

COURSE PLAN			
Course Title	STRENGTH OF MATERIALS AND CONCRETE LABORATORY		
Course Code	CELR10	**No. of Credits**	2
Department	Civil Engineering	**Faculty**	**Mr.Deendayal**
Pre-requisites Course Code	NIL		
Course Coordinator(s) (if, applicable)	-		
Other Course Teacher(s)/Tutor(s) E-mail		**Telephone No.**	
Course Type	☑ **Core course** ☐ **Elective course**		

COURSE OVERVIEW

This course emphasis on testing of a building materials in the loaboratory.

COURSE OBJECTIVE

- To find the Young Modulus, torsional strength, hardness and tensile strength of given specimens.
- To find impact value and crushing value of coarse aggregates.
- To find the compressive strength of concrete cubes and bricks.
- To find stiffness of open coiled and closed coiled springs.
- To find the physical properties of given coarse aggregate, fine aggregate and cement samples.

COURSE OUTCOMES (CO)

Course Outcomes	Aligned Programme Outcomes (PO)
A student would be able to do testing of a building materials (above) in the loaboratory.	

COURSE TEACHING AND LEARNING ACTIVITIES

S.No	Week	Topic	Mode of Delivery
1	Week 1	a) DEFLECTION OF SIMPLY SUPPORTED BEAM b) DEFLECTION OF CANTILEVER BEAM	Laboratory
2	Week 2	a) TEST ON CLOSED COIL SPRING b) TEST ON OPEN COIL SPRING	Laboratory
3	Week 3	a)TORSION TEST b) HARDNESS TEST	Laboratory
4	Week 4	a) COMPRESSIVE STRENGTH OF BRICK b) COMPRESSIVE STRENGTH OF CONCRETE CUBE	Laboratory
5	Week 5	a)STANDARD CONSISTENCY TEST b) INITIAL SETTING TIME TEST	Laboratory
6	Week 6	TENSION TEST	Laboratory
7	Week 7	a)CRUSHING TEST ON AGGREGATE b) IMPACT TEST ON AGGREGATE	Laboratory

COURSE ASSESSMENT METHODS

S.No	Mode of Assessment	Week	Duration	% Weightage
1	Continuous Assessment	All the weeks	3hour/week	75 marks
2	Final Assessment (Written test)	-	1/2 hour	25 marks
3	Total			100 marks

Text Book: STERNGTH OF MATERIALS by B.C. PUNMIA

COURSE EXIT SURVEY (mention the ways in which the feedback about the course is assessed and indicate the attainment also)

1. Class committee meetings
2. Feedback (Onlinethrough MIS)

COURSE POLICY (including plagiarism, academic honesty, attendance, etc.)

Min percentage of 75% attendance is compulsory for attending the final examination.

ADDITIONAL COURSE INFORMATION

The Course Coordinator's Room No.:
Timings:
Email ID:
Telephone No.:

FOR SENATE'S CONSIDERATION

Course Faculty Mr.Deendayal **CC-Chairperson** **HOD**