

INTRODUCTION TO CIVIL ENGINEERING - CE1010

Course 2 - Second trimester (Jan-Mar) 2021

Coordinators: Prof. Ravindra Gettu and Dr. Ramesh Kannan K

Timing: **Mon** - 12 to 12:50 Hrs & 16 to 16:50 Hrs, **Tue** - 15 to 16:50 Hrs

Timing: **Thu** - 10 to 10:50 Hrs, **Fri** - 12 to 12:50 Hrs

Email: gettu@iitm.ac.in, rameshkk@iitm.ac.in

Mode: Online - Microsoft Teams

Course Objectives:

As a freshman, you have chosen civil engineering by choice or by chance. Either way in order to become an all-round professional in this discipline, it is important to start with a question "what civil engineering is all about?". This course is primarily designed for undergraduate first year students and the objective is to answer the above mentioned question by,

- Introduction to civil engineering profession and how it unifies various aspects of science and engineering
- Introduction to various streams/specializations in civil engineering

Learning Outcomes:

At the end of the course, students should get encouraged and empowered to pursue this branch of engineering with sheer motivation and grit. The lectures from various experienced faculties will help the students to understand the "big picture" of this profession and will pave way for their long term career options in civil engineering.

Course outline: The following are the list of actions that will eventuate in this course.

- Online lectures
- Discussion sessions
- Individual project
- Weekly quiz (Every Monday between 16 to 16:50 Hrs)
- End semester exam

Grading Policy:

- Quiz - 30%
- Project - 30%
- Final exam - 40%

Course Registration: Please sign up for Moodle at IITM. We will confirm your enrolment for the course, then you will be able to see the course page.

MS Teams link for all the lectures: [Join Lecture](#)

Whatsapp group will be created by the Teaching Assistant - Please post your queries in that group anytime.

Teaching Assistants:

- Mr. Manu K Poulse — ce18d756@smail.iitm.ac.in — +91 9677169747
- Mr. Y Satish Chandra — ce16b020@smail.iitm.ac.in — +91 9940335191
- Mr. Sahil Wani — ce20d016@smail.iitm.ac.in — +91 7006524215
- Mr. Neeraj Pulaganti — ce19m024@smail.iitm.ac.in — +91 9014046467

References: The following are a restricted list of interesting books.

- Chen, W. F. and Liew, J. Y. R. (2003). *The Civil Engineering Handbook*. CRC Press.

Course Lectures: List of course lectures and timetable are given in the following page.

Academic Honesty: Lack of knowledge of the academic honesty policy is not a reasonable explanation for a violation.

Table 1: Lectures List

No.	Topic	Faculty	Lecture Date
1	What is civil engineering - I? Youtube — Download	Prof. Ravindra Gettu	25-Jan
2	What is civil engineering - II? Youtube — Download	Prof. Ravindra Gettu	26-Jan
3	Sustainability Youtube — Download	Prof. Ravindra gettu	28-Jan
4	Introduction to Environmental Engineering Youtube — Download	Prof. Indumathi M Nambi	29-Jan
5	Interesting Environmental Projects Youtube — Download	Prof. Indumathi M Nambi	01-Feb
6	Structural Conservation of Build Heritage Youtube — Download	Dr. Arun Menon	04-Feb
7	Hydraulic and Water Resource Engineering Youtube — Download	Prof. B. S. Murty	05-Feb
8	Geotechnical Engineering - I Youtube — Download	Dr. Subhadeep Banerjee	08-Feb
9	Geotechnical Engineering - II Youtube — Download	Dr. Ramesh Kannan K	11-Feb
10	Construction Materials and Methods Youtube — Download	Prof. Manu Santhanam	12-Feb

No.	Topic	Faculty	Lecture Date
11	Infrastructure management Youtube — Download	Prof. Ashwin Mahalingam	15-Feb
12	Structural Engineering - I Youtube — Download	Dr. Rupen Goswami	18-Feb
13	Structural Engineering - II Youtube — Download	Dr. Rupen Goswami	19-Feb
14	Structural Engineering- Analysis and Design Youtube — Download	Dr. Rupen Goswami	22-Feb
15	Structural Modelling Youtube — Download	Dr. P. P. Pratapa	25-Feb
16	Scope for Highway Engineers - I Youtube — Download	Prof. A. Veeraragavan	26-Feb
17	Scope for Highway Engineers - II Youtube — Download	Prof. A. Veeraragavan	01-Mar
18	Traffic Engineering and Planning Youtube — Download	Prof. V. Lelitha Devi	04-Mar
19	Hydrology and Water Security Youtube — Download	Dr. Venkatraman Srinivasan	05-Mar
20	An overview of Computational Science and Engineering Youtube — Download	Dr. C Annavarapu	08-Mar
21	The Big Picture Youtube — Download	Dr. Gitakrishnan Ramadurai	11-Mar

Table 2: Timetable

	Monday	Tuesday	Thursday	Friday
25-Jan	Introduction — Prof. Ravindra			
26-Jan		Holiday		
28-Jan			Prof. Ravindra	
29-Jan				Prof. Indumathi
01-Feb	Prof. Indumathi			
02-Feb		Discussions		
04-Feb			Dr. Arun	
05-Feb				Prof. Murty
08-Feb	Dr. Subhadeep			
09-Feb		Discussions		
11-Feb			Dr. Ramesh	
12-Feb				Prof. Manu
15-Feb	Prof. Ashwin			
16-Feb		Discussions		
18-Feb			Dr. Rupen	
19-Feb				Dr. Rupen
22-Feb	Dr. Rupen			
23-Feb		Discussions		
25-Feb			Dr. Pratapa	
26-Feb				Prof. Veeraragavan
01-Mar	Prof. Veeraragavan			
02-Mar		Discussions		
04-Mar			Prof. Lelitha	
05-Mar				Dr. Venkatraman
08-Mar	Dr. Chandrasekhar			
09-Mar		Discussions		
11-Mar			Dr. Gitakrishnan	
12-Mar				Project Discussions