

"Principles and Applications of Universal Testing Machine (UTM)"

The Sustainable Squad, Department of Civil Engineering, Faculty of Engineering and Technology, Manav Rachna International Institute of Research and Studies, has organised a Workshop on "Principles and Applications of Universal Testing Machine (UTM)" on March 24, 2023. Dr. Ashish Shukla started workshop by explaining the fundamental and working principle of Universal Testing Machine (UTM) and its applications in different domains of Civil Engineering, especially in the vertical of Concrete Technology. After explaining the different parts of the Universal Testing Machine, Dr. Shukla started the experimental phase of the workshop, where Dr. Shukla demonstrated the experiment to determine the strength of the concrete sample by putting the same under the Universal Testing Machine and applying load on the concrete sample. As the load increases, stresses inside the concrete sample increases, resulting in its failure at the Fracture Point. The results so obtained can be represented in the form of graphs under the computer software linked with Universal Testing Machine. Dr. Shukla used both cubical concrete samples and cylindrical concrete samples for better understanding the concepts related to the failure of the same to the students.

