

DEPARTMENT OF CIVIL ENGINEERING

“Earthquake & its Effects on Built Structures”

Department of Civil Engineering organized a technical talk on “Earthquake and its effects on Built Structures” on 14th June 2021 for 8th semester students through virtual mode with an objective of minimising the gap between the academics and industry.



Invites You For
Technical Talk On
**“Earthquake & its
effects on
built structures”**

Date: 14th June 2021
Venue: ATME College of
Engineering
Time: 11 am to 12.15 pm

Resource Person
Mr. Bhushan Mohan Raisinghani
Structural Consultant
Ahmedabad, Gujarat

Patron
Dr. Basavaraj L
Principal
ATMECE

Convener
Mr. Manu Vijay
HOD, Department of Civil Engineering
ATMECE, Mysuru

Chief Patrons
Sri. L Arun Kumar
Chairman, ATMECE, Mysuru
Sri. R Veeresh
Treasurer, ATMECE
Sri. K Shivashankar
Secretary, ATMECE

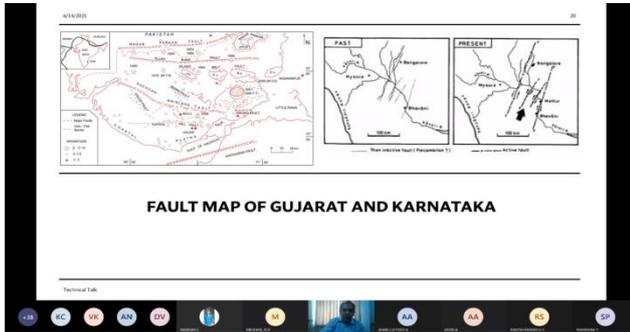
Coordinator
Mr. Shashank P
Asst. Prof., Department of Civil Engineering
ATMECE, Mysuru

Audience: 8th semester students of ATMECE Mysuru

Resource person during the presentation explained why earthquake occurs and importance of the structures to be safe during the earthquake and he also emphasised the major drawbacks and causes for the earthquake. He also showed the major earthquake occurred areas and the measures taken after the earthquake. Countries prone to earthquake having high Richter scale and precautionary measures taken before it occurs.

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Photos



BASIC MECHANISM

ACTION

- Shaking of ground: A, V, D graphs

RESISTANCE

- Inertia: at floor levels in a building
- Stiffness: columns and shear walls
- Damping: inherent or control systems

E.O.M

$$m\ddot{x} + c\dot{x} + kx = -m\ddot{u}_g(t)$$

$$\ddot{x} + \frac{c}{m}\dot{x} + \frac{k}{m}x = -\ddot{u}_g(t)$$

Inertia Force ($F=ma=0$): Any force invoked by an observer to maintain the validity of Isaac Newton's second law of motion in a reference frame that is rotating or otherwise accelerating at a constant rate

Event Platform: **MS Team**

Event Link: <https://web.microsoftstream.com/video/1d751093-945b-431d-84e9-896140071bc4>