Seismic Isolation of Structures

Course Title	Seismic Isolation of Structures		
Course Category	Research		
Relevant Discipline(s)	Civil Engineering/Structural Engineering		
Duration of course in equivalent integer	5 days (30 hrs)		
no. of days (min 3 days, 1 day = 6 hrs of			
lectures/hands on sessions)			
	11 th December – 27 th December		
Proposed dates	11 th Dec, Friday: 17:00-20:00 hrs 12 th Dec, Saturday: 12:00-17:00 hrs 13 th Dec, Sunday: 11:00-13:00 hrs 18 th Dec, Friday: 17:00-20:00 hrs		
	19 th Dec, Saturday: 12:00-17:00 hrs		
	20 th Dec, Sunday: 11:00-13:00 hrs		
	26 th Dec, Saturday: 12:00-17:00 hrs 27 th Dec, Sunday: 12:00-17:00 hrs		

Brief Course Description and Course Contents

The proposed course "Seismic Isolation of Structures" is a major research area in the domain of earthquake resistant design of structures.

The course will focus on acquiring knowledge of the seismic isolation technology for earthquake safety of buildings, bridges and other type of structures. The dynamics of base-isolated structures subject to earthquake ground excitations would be discussed. Different type of isolators would be presented, and their mechanical behavior would be characterized. The design procedures for the isolators would be presented. The course will provide the requisite knowledge and equip participants with necessary skills required for analysis and design of seismically isolated structures.

Course content:

Introduction to seismic isolation

Dynamics of base-isolated structures

Characterization and testing of seismic isolators

Design procedures for seismic isolators

Modeling and analysis of seismically isolated structures

Instructor Details					
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No.	Instructor	t			
1	Manish Kumar	Civil	IIT Bombay	mkumar@iitb.ac.i	
		Engineering		<u>n</u>	