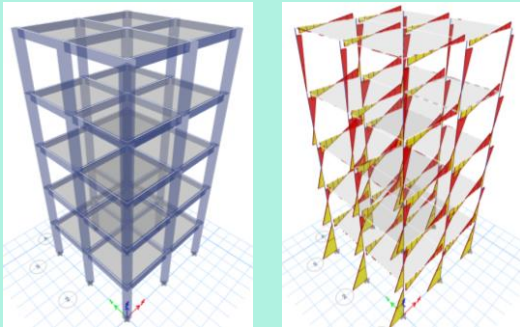




**VIT**  
Vellore Institute of Technology  
(Deemed to be University under section 3 of UGC Act, 1956)

**Two Day Workshop  
On  
Seismic Analysis and Design of RC and  
Steel Buildings using ETABS**



**Date: 04<sup>th</sup> and 05<sup>th</sup> November, 2023**

Organized by

Department of Structural and Geotechnical  
Engineering

**School of Civil Engineering**  
VIT, Vellore

In association with

**Indian Society of Earthquake Technology  
(ISET)**  
Vellore Chapter



**About Vellore Institute of Technology:**

VIT has made a mark in the field of higher education in India imparting quality education in a multicultural ambiance, intertwined with extensive application oriented research. VIT was established in 1984 by the well-known educationist, and former parliamentarian, honourable Dr.G.Viswanathan, the Founder and Chancellor, a visionary who transformed VIT into a Centre of Excellence in higher technical education. It persistently seeks and adopts innovative methods to improve the quality of higher education in all fields of science and technology. As per QS World University Ranking 2023, in Engineering and Technology, VIT stands 240th best in the World, the 9th best in India, and by Subject 2023: Computer Science and Information Systems, VIT stands under the band of 201- 250, securing 8th rank in India. Also based on the same survey, eight subjects of VIT are within the top 500 in the world. It is ranked the 8th best University, 11th best Research institution, and the 11th best Engineering institution in India (NIRF ranking, Govt. of India 2023) and has got A++ in the 4th cycle of NAAC accreditation.

**About School of Civil Engineering:**

The School of Civil Engineering (SCE) is a part of the institute since its inception. The school has grown tremendously over the past thirty years and is now recognized as one of the major engineering schools in VIT. The school has

47 faculty members from elite institutions across the globe. Besides high quality teaching and research at both UG and PG levels, faculty members of the school are actively involved in executing a number of R&D and Consultancy projects from government agencies including DST, ISRO, UGC, AICTE, and also from many reputed industries.

The School of Civil Engineering, with its multifaceted faculty members, continues to maintain and cultivate its strong link with the infrastructural industry such as L&T, HCC, DLF, RAMCO, CCL, Godrej, TATA Consultancy, etc. The Strength of Materials laboratory is one of the best with accreditation by NABL (National Accreditation Board for Testing and Calibration Laboratories) from OCT -2018 onwards. The school has also regularly benefited from international linkages facilitated by the university level MoUs with a number of leading foreign universities such as Deakin University, Queensland University of Technology (QUT), West Virginia University, North Dakota State University, etc.

**About ISET Vellore Chapter:**

By the initiatives of VIT Vellore, ISET Vellore Chapter was established in December 2016 for the public welfare and seismic resilient India, as a forum for scientists and engineers of various specializations to join together and exchange ideas and to promote research, development and awareness work in the field of Earthquake Technology.

### **About Workshop:**

The seismic analysis and design of multi-story buildings play a vital role in guaranteeing the safety and structural soundness of contemporary urban infrastructure. Earthquakes, as natural disasters, possess the potential to inflict severe harm on buildings and pose a substantial peril to human lives. Given that multi-story buildings often accommodate a considerable number of individuals, it becomes imperative to safeguard their well-being in the face of seismic events. Thorough analysis and well-executed design measures ensure that occupants stand a better chance of survival in the event of an earthquake. The process of analyzing and designing for seismic forces draws insights from historical events and the wisdom gleaned from previous building failures. The ongoing commitment to research and development serves to enhance building standards and practices progressively over time.

The primary objective of this workshop is to offer fundamental insights into the analysis and design of reinforced concrete (RC) and steel buildings to withstand seismic forces. Additionally, the event encompasses both linear and non-linear static as well as dynamic analysis techniques. The workshop is designed to serve as a forum where undergraduate students, postgraduate students, and research scholars can acquire comprehensive knowledge in the realm of earthquake-resistant design.

### **Organizing Committee**

#### **Chief Patron:**

**Dr. G. Viswanathan**, *Chancellor*

#### **Patrons:**

**Mr. Sankar Viswanathan**, *Vice President*

**Dr. Sekar Viswanathan**, *Vice President*

**Dr. G. V. Selvam**, *Vice President*

**Dr. V. S. Kanchana Bhaaskaran**, *Vice-Chancellor-i/c*

**Dr. Partha Sharathi Mallick**, *Pro Vice Chancellor*

**Dr. T. Jayabarathi**, *Registrar*

#### **Convener:**

**Dr. A. S. Santhi**, Professor (HAG) and Dean  
School of Civil Engineering, VIT Vellore.

#### **Co- Convener:**

**Dr. A. Punitha Kumar**, Associate Professor and  
HOD, SGE, SCE, VIT Vellore

**Dr. S. Mahenthiran**, Assistant Professor Sr. and  
HOD, EWRE, SCE, VIT Vellore

#### **Resource Persons:**

**Dr. A. Punitha Kumar**, Associate Professor and HOD  
- SGE, SCE, VIT Vellore

**Dr. J. Visuvasam**, Assistant Professor Sr.,  
SCE, VIT Vellore.

**Dr. T. S. Viswanathan**, Associate Professor, SCE, VIT  
Vellore.

**Dr. K S K Karthik Reddy**, Assistant Professor Sr., SCE,  
VIT Vellore.

### **Topics to be covered:**

- Analysis of RCC and Steel Buildings for Gravity Loading (DL and LL).
- Analysis for Lateral Loading (Wind and Seismic Forces).
- Design of Multi-Storied Building as per Limit State Method
- Nonlinear Static and Dynamic Analysis

### **Targeted Participants:**

- Under Graduate and Post Graduate Civil Engineering Students and Research Scholars.

### **Registration:**

- Last Date of Registration: 03/11/2023
- Register online at: <https://events.vit.ac.in/>
- Registration Fees – Rs. 236 /- (Inclusive of GST)

### **Faculty Coordinators:**

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**Dr. Ankit Bhardwaj**, Assistant Professor,  
School of Civil Engineering, VIT Vellore.  
Ph: 9716132601; Email: [ankit.bhardwaj@vit.ac.in](mailto:ankit.bhardwaj@vit.ac.in)

### **ISET- Coordinators:**

**Dr. G. Mohan Ganesh**, Professor (HAG) and  
Chairman, ISET Vellore Chapter,  
School of Civil Engineering, VIT Vellore.

**Dr. P. Rama Mohan Rao**, Professor - CDMM and  
Secretary, ISET Vellore Chapter,  
School of Civil Engineering, VIT Vellore.