

**SCHOOL OF INFRASTRUCTURE**

**DEPARTMENT OF CIVIL ENGINEERING**

**Ref:810-1/Dean(Sol)/0524**

**Date:23.05.2024**

**REPORT**

**GUEST LECTURE ON STRUCTURAL ANALYSIS OF BUILDING:  
ISSUES & CHALLENGES**

**Date:24/04/2024**

**Time:11.00 am to 12.40 pm**

**Preamble:**

A Guest Lecture on “Structural Analysis of Building: Issues & Challenges” was organized by ASCE Student Chapter, Department of Civil Engineering on 24.04.2024,11.00 am at Seminar Hall for the benefit of II Year B.Tech Civil Engineering and M.Tech Structural Engineering students.

**ABOUT THE SPEAKER**

Ms. Elakeya Umashankar,. Structural Engineer and CEO of M/S. S&J Engineering Services, with 5+ years of experience. She is a growth strategist with experience in providing high – end administrative function to power business growth, improve team performance and introduce innovative solutions.

**ABOUT THE SESSION:**

Dr.P.Gajalakshmi, Professor, gave a warm welcome to the students & extended a brief introduction about the guest speaker. In her welcome address, she briefed about the significance of Issues & Challenges face during the Structural Analysis of Building and its role in helping Civil Engineering professionals in terms of technology advancements, etc.

Ms. Elakeya emphasized that structural analysis involves assessing the forces and stresses acting on structure. Engineers use mathematical models and computer simulations to analyze how different materials and components interact under various conditions. This helps to identify potential weak points and area of concern.

Once the analysis is complete, engineers proceed to design the structure to meet safety and performance requirements. This includes selecting appropriate materials, determining dimensions and specifications for structural elements, and ensuring compliance with building codes and regulations.



**Lecture by Ms. Elakeya Umashankar**

The speaker discussed about some of the major challenges faced during the Structural Analysis & Design of a Building then explained the stages involved in design process.

She also discussed about the various topics of Load Computations, Functionality based on design, Sustainable design, Resilience to climate change, Aging of Structure, Innovative Design, Integration of Technology, Cost Effective Design, Regulations & Standards.

Finally, she emphasized about the Value Engineering which is a process finding and using an acceptable material and process substitutes that will optimize the cost and performance of the building. It using creative and analytical tools to optimize the spaces. It also using the engineering knowledge to make strategic plan and optimization to save time and money.

The session was very much informative and interactive. The students clarified their doubts through a very active interaction with the speaker.

The Following Faculty Members and Students were present during the lecture.

**A. Faculty Coordinators**

1. Dr. P. Gajalakshmi, Professor
2. Dr.V.S.Priya,Associate Professor
3. Dr. Nisha Khanam, Assistant Professor (Sel.Gr)
4. Ms.K.Kanmani,Assistant Professor

**B. II Year B.Tech Civil Engineering Students**

S.No	RRN No.	Name in block letters
1	220011601001	AADAM GANI J
2	220011601002	ABISHEK P
3	220011601003	AFSAL AHAMED
4	220011601004	AHAMED NAEEM A
5	220011601005	AMEER SHAKEER S
6	220011601006	AMJATH T T
7	220011601007	ANANDHA KUMAR R
8	220011601008	ANBUSELVAN R
9	220011601009	AREEB ROHAN K
10	220011601010	ASHWITHA M
11	220011601011	DHEEPAK KUMAAR S
12	220011601012	FAISAL AHAMEED F S
13	220011601013	HALITH ISHA C
14	220011601015	MOHAMED JAFRON S
15	220011601016	MOHAMED MUBEEN
16	220011601017	MOHAMED RIYAZUDHEEN R
17	220011601018	MOHAMMED RAIHAAN R
18	220011601019	PRADEEP D
19	220011601020	PRADHEESH M
20	220011601021	RASETH IMAM NOOR
21	220011601023	ROSHAN AKTHAR M I
22	220011601024	SAI EASWAR S S
23	220011601025	SHARON AKRAM A
24	220011601026	SYED TALHA S H
25	220011602001	DEV L
26	220011602002	ISHAK AHAMED A
27	220011602003	MD ABUBAKAR S
28	220011602004	MOHAMAD NIZHAR.J
29	220011602005	MOHAMED ABU RIYAS S
30	220011602006	MOHAMED ANAS S
31	220011602007	MOHAMED FAAIZ S

32	220011602008	MOHAMED FAISAL
33	220011602009	MOHAMED FAIZAL
34	220011602010	MOHAMED KALIFA K
35	220011602011	MOHAMED SAMEER KM
36	220011602012	MOHAMED UVAIS M
37	220011602013	SHAFI AHMED S
38	220011602014	DANIEL MARIA SANTHOSH J
39	220011602015	SYED RAASHID MOULANA S
40	220011603001	SHAHEED AFRIDI

### I Year M.Tech Structural Engineering Students

S.No	RRN	NAME
1.	231202601001	Charumathi M
2.	231202601002	Hrithik Ramkumar
3.	231202601003	Muhammad Ibrahim L
4.	231202601004	Naveen E
5.	231202601005	Saran T
6.	231202601006	Shaik Davood
7.	231202601007	Praveen J

Vote of thanks was proposed by Dr. P. Gajalakshmi, Professor. A memento was awarded to the resource person as a token of appreciation.



**Awarding memento to the speaker**

## OUTCOME

➤ The Lecture on “Structural Analysis of Building : Issues & Challenges” is a value addition because it familiarized the students with the issues and challenges faced during the Structural Analysis & Design of a Building.

*Phayalal 23/5/24*

**Faculty In-charge**  
**(Dr.P.Gajalakshmi, Professor)**

*M. S. Haji Sheik Mohammed*

**Dean, Sol**  
**(Dr. M. S. Haji Sheik Mohammed)**