

## DEPARTMENT OF CIVIL ENGINEERING ACADEMIC YEAR 2023 – 2024 CIRCULAR

DATE: 19.02.2024

This is to inform our department faculty that there will be an internal staff seminar. The details of the staff seminar are given below.

Name of the faculty : Mrs.K.KANIMOZHI

Date

: 23.02.2024

Venue

: Smart classroom (Hall no 236)

Time

: 12:30 PM

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**DRC MEMBER** 

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# DEPARTMENT OF CIVIL ENGINEERING ACADEMIC YEAR 2023-2024/EVEN SEMESTER INTERNAL STAFF SEMINAR – REPORT

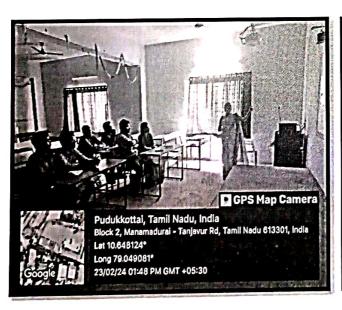
23/02/2024

## **Background & Objective**

Department of Civil Engineering had organized an Internal Seminar for the Department staff members for accessing online journals. The purpose of this seminar is to equip the faculty in new techniques through accessing online journals like MAT, ELSEVIER etc.

#### Seminar Session

A Seminar was held in the Department of Civil Engineering on 23rd February, 2024 at 12:30 PM. Mrs.K.KANIMOZHI/AP delivered his seminar talk on "Transforming the civil engineering sector with generative artificial intelligence". The paper was referred from ELSEVIER Journal, SSRN(2024).





## Internal Seminar Session by Mrs.K.KANIMOZHI /AP CIVIL

### Theme:

This work presents the The infusion of generative artificial intelligence (AI) stands out as a transformative influence in civil engineering, reshaping conventional methodologies and

elevating the effectiveness and precision across various domains. This study delves into the nuanced impact of ChatGPT, a potent language model, in key realms within civil engineering: Structural Engineering, Geotechnical Engineering, Transportation Engineering, Environmental Engineering, Water Resources Engineering, Urban and Regional Planning, Materials Engineering, Coastal Engineering, and Earthquake Engineering. Within Structural Engineering, ChatGPT assumes a central role in formulating and refining structural designs. By deciphering intricate engineering concepts and proposing inventive solutions, ChatGPT assists engineers in crafting structures that not only exhibit resilience but also optimize resource utilization. Its proficiency in scrutinizing extensive datasets and delivering insights positions it as an invaluable tool for augmenting structural integrity and safety.

## Scope for future work:

- By using GenAI we can develop software for each and every stage of construction management.
- In future, the improvement of AI will leads to save more time and ensures safety at most.
- Accuracy of the project can be predicted earlier by using AI software.

#### Outcome:

- The Seminar clearly spotlights the infusion of AI in civil engineering sector. From structural engineering to all other departments chatGPT will play a vital role in future.
- In structural engineering, ChatGPT assumes a pivotal role. Its aptitude for comprehending intricate structural designs, analyzing load-bearing capacities, and proposing optimized solutions positions it as a collaborative ally for engineers. The ability to generate design alternatives and conduct virtual simulations facilitates swift iteration and optimization, resulting in cost-effective and resilient structures.
- The journey towards a smarter, safer, and more efficient civil engineering sector is well underway, driven by the synergies between human expertise and the capabilities of generative AI.
- The advent of generative artificial intelligence, as illustrated by technologies such as ChatGPT, has inaugurated a new era of ingenuity and efficacy in civil engineering

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## DEPARTMENT OF CIVIL ENGINEERING INTERNAL STAFF SEMINAR – ATTENDANCE AND FEED BACK

S.NO	NAME	FEEDBACK	SIGN
1	Mr. R.Sundharam	Recent topic and Nice Presentation	R. Stran
2	Mr.R.Ramchandar	Trendy Presentation	Q. Pometanto 23/2/24
3	Mrs.A.Suganya	Effective & useful presentation	£23/2/24.
4	Mr.A.Sagaya Albert	Nice content, Advanced topic Good presentation	Engryadlbelt 25/02/24
5	Mr.D.Nandakumar	Excellent Presentation.	D.Not 23/2/29
6	Mr.K.Sriram gopal	Innovating topic skettion, Nice presentation, Worthy	A STORY