

With the blessings of Their Holinesses



**SRI CHANDRASEKHARENDRA SARASWATHI VISWA
MAHAVIDYALAYA**

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**DEPARTMENT OF ELECTRONICS
AND INSTRUMENTATION
ENGINEERING**



**MOBILE AWARENESS PROGRAM
SEMINAR
REPORT**

22.08.2024

Report on the Mobile Awareness Program Seminar by

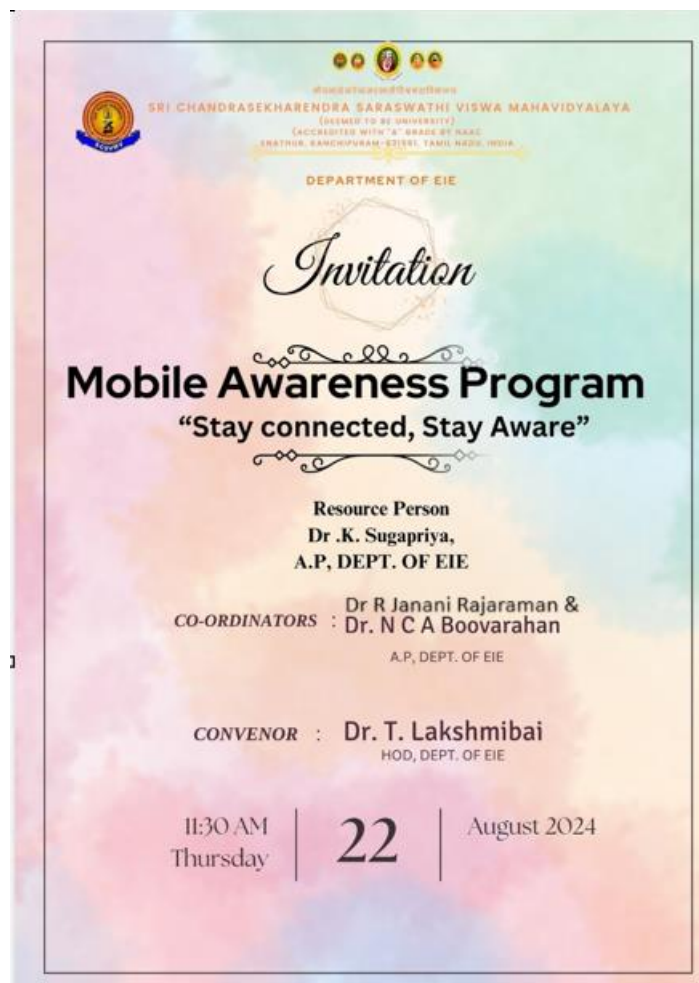
Dr. K Sugapriya, A.P/EIE

Date: August 22, 2024

Venue: Library Second Floor, SCSVMV Deemed University

Speaker: Dr. K Sugapriya, Assistant Professor, Department of Electronics and Instrumentation Engineering, SCSVMV Deemed University

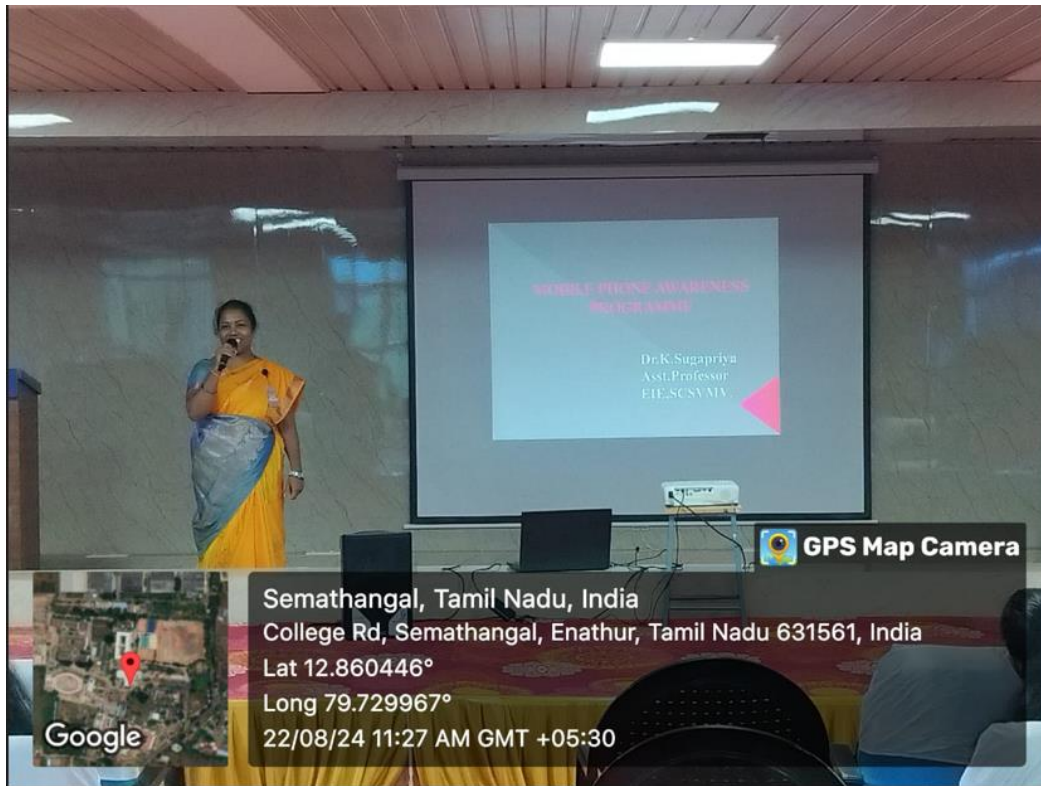
Audience: CSE First-year Engineering students of Section C & D



Introduction

On August 22, 2024, Dr. K Sugapriya, A.P/EIE of SCSVMV Deemed to be University, delivered a seminar on the “Mobile Awareness Program” as part of the student induction program organized in coordination with the EIE department. The event took place at the Auditorium,

Library second floor and was attended by first-year engineering students. The purpose of the seminar was to educate the students about the evolution of mobile technologies, the underlying cellular concepts, and to share essential guidelines on the appropriate use of mobile devices.



Overview of the Seminar

Speaker began the seminar by providing a brief history of mobile communication technologies, covering the evolution of mobile generations from 1G to 5G, and discussing potential future developments. She explained how each generation improved upon the previous one in terms of data speed, connectivity, and technological advancements.



Generations of Mobile Communication

1G to 5G Evolution:

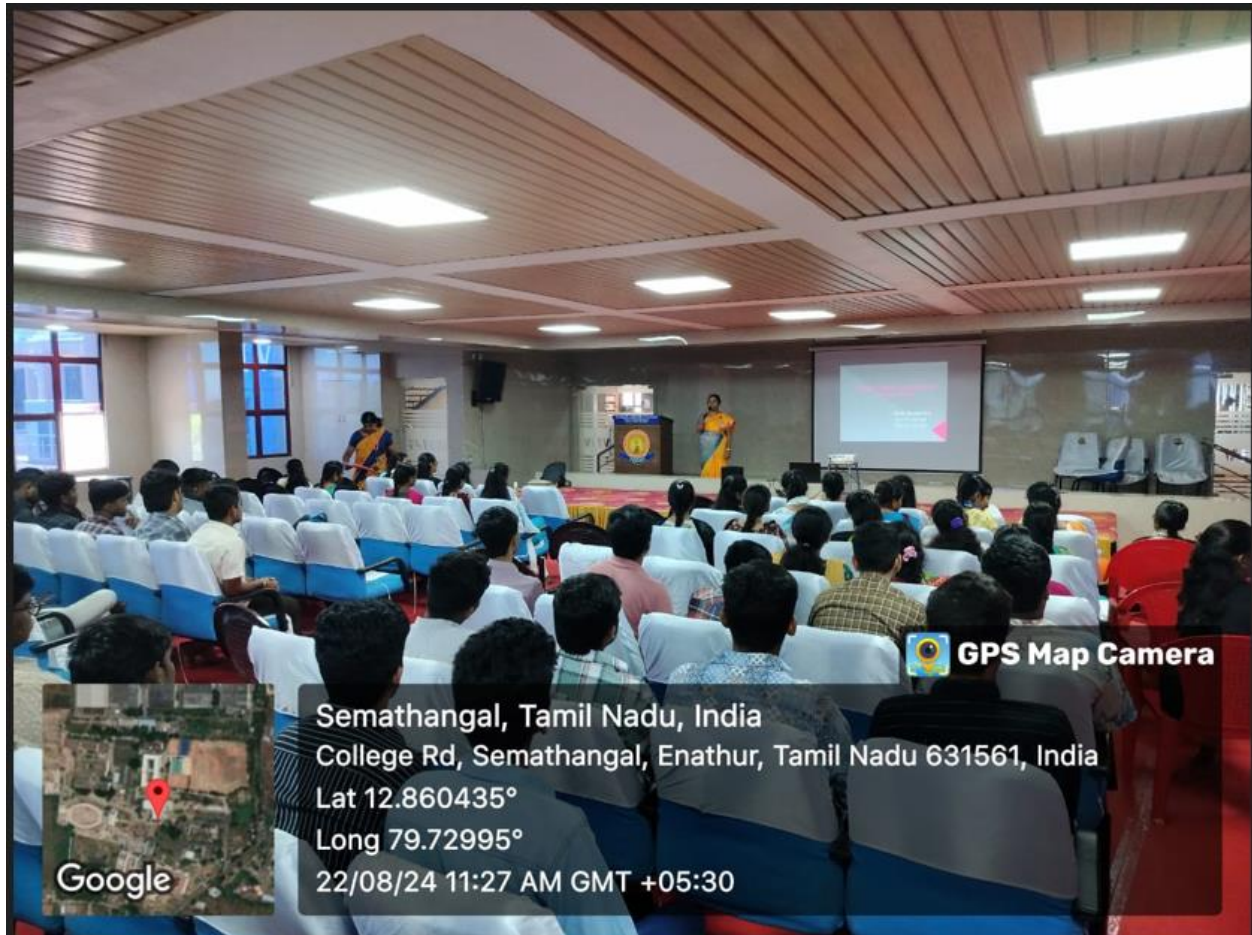
1G (First Generation): Dr. Sugapriya explained the basics of 1G, the analog telecommunications system which marked the beginning of mobile communications in the early 1980s.

2G (Second Generation): She highlighted the shift to digital communication with 2G, which introduced text messaging and increased network capacity.

3G (Third Generation): The seminar covered the introduction of 3G, which brought mobile internet access, video calls, and better multimedia support.

4G (Fourth Generation): Dr. Sugapriya discussed the era of 4G, which revolutionized mobile broadband with high-speed internet and enhanced user experience for online services, such as HD video streaming.

5G (Fifth Generation): The speaker provided insights into the latest advancements with 5G, emphasizing its ultra-fast speed, low latency, and the potential to support IoT (Internet of Things) applications.



Cellular Concepts

The seminar also delved into the fundamental concepts of cellular communication, explaining how mobile networks operate. Then, discussed the concept of cells in cellular networks, the role of base stations, and how frequency reuse enables efficient spectrum utilization. She highlighted the importance of handover procedures that ensure seamless connectivity when a user moves from one cell to another.

SAR

Dr.K.Sugapriya discussed measures the rate of RF energy absorbed by the body from a mobile device, with safety limits set by regulatory bodies (e.g., 1.6 W/kg in the US) & to minimize SAR

exposure, use hands-free devices, limit call duration, and avoid using phones in areas with poor reception.



Dos and Don'ts of Mobile Usage

Dr.K.Sugapriya emphasized the responsible use of mobile devices. She shared several guidelines with the students:

Dos:

- Use mobile phones for educational and productive purposes.
- Be aware of data privacy and protect personal information.
- Limit screen time to avoid health issues like eye strain and poor posture.
- Regularly update the software to ensure the device's security.

Don'ts:

- Avoid using mobile phones while driving or in restricted areas.
- Refrain from sharing sensitive information over untrusted networks.
- Do not overuse social media and other apps that could lead to distractions.
- Avoid charging phones overnight or using unapproved chargers to prevent battery damage.

Conclusion

The seminar concluded with an interactive Q&A session where students posed questions about the future of mobile communication, the implications of emerging technologies like 6G, and best practices for safeguarding personal data on mobile devices. Dr.K.Sugapriya effectively addressed their queries and reiterated the significance of responsible mobile usage in the digital age.

Feedback and Impact

The seminar was well-received by the students, who appreciated the insights shared by speaker. The session helped them understand the technological evolution of mobile communication and its impact on their daily lives, while also making them more aware of the importance of using mobile devices responsibly. The Electronics and Instrumentation Engineering Department extends its gratitude to Dr.KSugapriya for her valuable contribution to the students for enlightening the critical topic of mobile awareness.