

**D.K.M. COLLEGE FOR WOMEN (AUTONOMOUS), VELLORE-1**

**DEPARTMENT OF MATHEMATICS**

**REPORT ON SEMINAR**

**Invitation**



**D.K.M COLLEGE FOR WOMEN  
(AUTONOMOUS), VELLORE-1  
(Accredited by NAAC with 'A' Grade)**

**DEPARTMENT OF MATHEMATICS**

**Organizes a Seminar on**

**“Applications of Mathematics in Science and  
Technology”**



**Dr. A. MANIMARAN**

**Assistant Professor (Senior)  
Department of Mathematics  
School of Advanced Sciences  
VIT University, Vellore**

**Date: 18.02.2025**

**Time: 10.00 am**

**Venue: D Block Conference Hall**

**All are cordially invited**

**Principal, Management, Staff and Students**

# **D.K.M. COLLEGE FOR WOMEN (AUTONOMOUS), VELLORE-1**

## **DEPARTMENT OF MATHEMATICS**

### **Program Objectives:**

- Equip students with the ability to use mathematical tools in scientific research, engineering, finance, data science and technology.
- Integrate mathematics with fields like physics, computer science, engineering to enhance problem-solving across disciplines.

### **Program Outcomes:**

- Students demonstrated a solid understanding of mathematical theories, principles and techniques relevant to real-world applications.
- They learned about how to apply mathematical knowledge effectively in diverse professional and contributing to advancements in science, technology and industry.

## **REPORT**

The Department of Mathematics organized a seminar on “Applications of Mathematics in Science and Technology” on 18.02.2025. The program commenced with Tamizhthai Vazhthu at 10:00 a.m. in the D Block Conference Hall. Dr. A. Amirthavalli, Head & Associate Professor of History, felicitated the gathering, followed by the welcome address delivered by Mrs. G. Vinu Priya, Assistant Professor and Head, Department of Mathematics. Dr. M. Kasthuri, Assistant Professor of Mathematics, introduced the resource person.

Mathematics is a fundamental tool in science and technology, providing the framework for understanding natural phenomena and developing technological advancements. It plays a crucial role in various fields, including physics, engineering, computer science, medicine, and economics. Mathematics helps formulate physical laws and theories, such as Newton’s Laws of Motion and Quantum Mechanics. In particular, calculus is used to understand motion, forces, and energy, while differential equations are applied in wave propagation, heat transfer, and electromagnetism.

The guest speaker for the session was Dr. A. Manimaran, Assistant Professor (Senior), Department of Mathematics, School of Advanced Sciences, VIT University, Vellore. He addressed the students on the topic “Applications of Mathematics in Science and Technology.” Dr. A. Manimaran provided insightful explanations on the use of mathematics in various fields. Specifically, he discussed the sprung model using differential equations in vehicle manufacturing. The sprung model, typically referring to a spring-mass-damper system, is used

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to model mechanical vibrations in engineering. The differential equation governing such a system is based on Newton's Second Law, considering the forces acting on the mass. This model is particularly useful in designing effective vehicle suspension systems.

Ms. G. Kanishka, Student Secretary of II B.Sc. Mathematics, served as the Master of Ceremony, and Dr. M. Devi, Assistant Professor of Mathematics, proposed the vote of thanks. Around 144 B.Sc. Mathematics students participated in this seminar. The meeting concluded with the National Anthem.

**PHOTOGRAPHIC EVIDENCE**



**A Seminar entitled, “Applications of Mathematics in Science & Technology”, conducted on 18.02.2025**

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**Special talk given by Dr. A. Manimaran, Assistant Professor (Senior), Department of Mathematics, School of Advanced Sciences, VIT University, Vellore-14.**