



# STEM

SCIENCE

TECHNOLOGY

ENGINEERING

MATHEMATICS



## Hands-on workshop on STEM Education

**Date:** 10th September

**Timings:** 11 am – 01 pm

**Venue:** Stein Auditorium, India Habitat Center, New Delhi

**STEM** stands for **Science, Technology, Engineering, and Mathematics**. STEM Education is important because it pervades every part of our lives. Science is everywhere in the world around us. Technology is continuously expanding into every aspect of our lives. Engineering is the basic designs of roads and bridges but also tackles the challenges of changing global weather and environmentally-friendly changes to our home. Mathematics is in every occupation, every activity we do in our lives. By exposing students to STEM and giving them opportunities to explore STEM-related concepts, they will develop a passion for it.

## Let's understand STEM Education via Cooking!

Imagine you are baking a cake. To do this correctly, you need to bring about the right conditions for the right chemical reactions to occur. You need to use math to ensure all your measurements are exact. Using digital thermometers or scales could be needed. You may even spend a lot of time engineering the cake into a recognizable shape. Finally, you can bring in the Arts (making it a STEAM activity – where A means Arts) as you apply your icing in a way that makes your creation beautiful and appetizing.

STEM education integrates concepts that are usually taught as separate subjects in different classes and emphasizes the application of knowledge to real-life situations. A STEM-based lesson has real-life situations to help the student learn and integrates them into a cohesive learning paradigm based on real-world applications.

At ICSE – 2019, we are collaborating with the Vikram A. Sarabhai Community Science Centre to conduct a two hour session focusing on this very aspect in a practical, hands-on, fun to learn method. The session is designed keeping in mind students of class 9th.

Activities planned during the workshop.

- A game based on binary number system.
- Demonstration of fun science activities.
- Hands-on activity of Northern Circumpolar Star Chart.
- Scientific understanding of Model Rockets and its types.
- Demonstration of Water Booster Model Rocket Launch.

We welcome your school to register 10 students accompanied by a teacher to join us and be a part of this fun learning activity.

**Note:** *The students need to come in uniform, carry their id-cards and a notebook – pen to undertake notes.*