SYNOPSIS

Title: "An Overview of Multidisciplinary approaches in Civil Engineering" from 07th Sep 2020 to 11th September 2020

Convenor: **Mr. Sujay S,** Assistant Professor and Head of Civil Engineering, RIT, Hassan

Faculty coordinators: **Mr. Sanjay Kumar A C,** Assistant Professor, Dept. of Civil Engg, RIT, Hassan

Attendees: Faculties of Civil Engineering & Faculties from all over Karnataka

The Faculty development Programme started at 2:00 p.m Mr. Sujay S, Assistant Professor and Head of the Department of Civil Engineering welcomed Dr. Ramakrishna A N, Principal, Rajeev Institute of Technology, Hassan to the Faculty development Programme.

He welcomed all the Resource person and faculties to the FDP. Dr. Ramakrsihna A N, Principal addressed the FDP and advised students to develop skills of civil engineering. Mr. Sanjay Kumar A C, Coordinator of the FDP gave an introduction about

Days	Name of the Resource Person	Designation	Topics	College/Company details
07/09/2020 2:30-4:00PM	Mr. S.B Devaraj	Associate Professor	An introduction to seismology & earthquake engineering	M.C.E Hassan
08/09/2020 2:30-4:00PM	Dr. Santhosh G. Thampi	Professor	Prediction on impact of Climate change on stream flow	NIIT Calicut
09/09/2020 2:30-4:00PM	Mr.Shoban Mujumder	Assistant Manager (Utility)	Ambient air quality modeling	Anheuser Busch inBev India Ltd. Mysuru
10/09/2020 2:30-4:00PM	Dr. Basavaraju Manu	Associate professor.	Efficient Economical and Green disinfection technique for COVID 19 Virus removal	NITK Surathkal
11/09/2020 11:00 to 12:30PM	Mr. Somshekar. N	Technical service manager,	Concrete as a solution	Ultratech, Mysuru

The details of the presentation are as above follows.

1. **Objective:**
   - Familiarize faculty with the importance of multidisciplinary approaches in Civil Engineering.
   - Explore the integration of environmental considerations in infrastructure projects.
   - Discuss the role of technology in enhancing the efficiency of Civil Engineering practices
   - Encourage collaborative research and projects across different engineering disciplines
   - Enhance the ability of faculty to incorporate multidisciplinary perspectives in teaching.

2. **About the Activity:**
   - The Faculty Development Program on "An Overview of Multidisciplinary Approaches in Civil Engineering" was conducted from 07/09/2020 to 11/09/2020 at Rajeev Institute of technology. The program aimed to equip faculty members with a comprehensive understanding of the multidisciplinary aspects within the field of Civil Engineering. The program utilized a blend of theoretical sessions, practical demonstrations, and interactive workshops. Experts from the field presented case studies showcasing successful multidisciplinary projects, and participants engaged in discussions on potential applications in their teaching and research

3. **Outcome:**

The FDP successfully achieved its intended outcomes:

1. Understanding the role of environmental considerations in civil engineering projects.
2. Integration of technology for more sustainable and efficient infrastructure solutions.
3. Strategies for fostering collaboration between civil engineering and other engineering disciplines.
4. Practical approaches to incorporating multidisciplinary content in teaching.
5. Recognition of the importance of lifelong learning in a rapidly evolving field.

4. **Benefit to Faculties**:

The FDP delivered several benefits to the participating Faculty's attended:

1. **Structural Health Monitoring (SHM):** Combining civil engineering with sensor technology, data science, and even machine learning to monitor the health and performance of structures in real-time. This helps in early detection of potential issues and allows for proactive maintenance.
2. **Smart Cities:** Civil engineers teaming up with urban planners, computer scientists, and

environmental experts to create sustainable and efficient urban environments. This involves incorporating technology for better infrastructure, transportation systems, and resource management

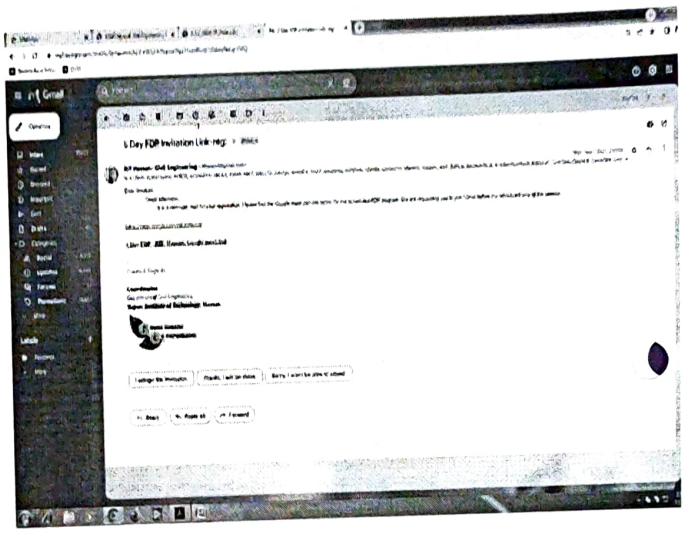
3. **Geotechnical Engineering**: Collaboration with geologists, environmental scientists, and even physicists to understand and manage the behavior of soil and rock. This is crucial for foundation design, slope stability analysis, and earthquake engineering.
4. **Materials Science :** Working with materials scientists to develop new construction materials with enhanced properties, such as increased strength, durability, and sustainability.
5. **Environmental Engineering:** Addressing environmental concerns by teaming up with environmental engineers to ensure that civil engineering projects are not only functional but also environmentally friendly. This includes waste management, water treatment, and pollution control.
6. **Risk Management:** Collaborating with experts in risk assessment and management to analyze and mitigate potential risks associated with civil engineering projects. This is crucial for ensuring the safety and success of the projects.
7. **Renewable Energy Integration:** Partnering with electrical engineers and energy experts to incorporate renewable energy sources into civil engineering projects. This might involve designing structures that can harness solar or wind energy.
8. **Transportation Engineering:** Joining forces with experts in transportation planning, logistics, and even behavioral economics to create efficient and sustainable transportation systems. This includes everything from road and bridge design to traffic management.

These multidisciplinary approaches not only enhance the effectiveness of civil engineering projects but also contribute to the overall advancement of technology and knowledge across various fields. It's like a big collaborative puzzle where each piece plays a crucial role in creating a complete and successful picture.

Summary:

The Faculty Development Program on "An Overview of Multidisciplinary Approaches in Civil Engineering" successfully enriched the knowledge and skills of faculty members. It is anticipated that the insights gained from this program will contribute to the advancement of teaching, research, and collaborative projects within the field of Civil Engineering.

Photos:



Signature of the Coordinator

Signature of the HOD

Head of the Department
Department of Civil Engineering
Rajeev Institute of Technology
HASSAN