# **About MBM Engineering College**

M.B.M Engineering College is the first college in Rajasthan established post-independence on 15 August 1951, by the Government of Rajasthan. MBM offers more than 25 courses of study in engineering leading to the degrees of Bachelor of Engineering, Master of Engineering, Doctor of Philosophy (Ph.D.), and Post Graduate Diploma.

Mechanical Engineering department is currently running B.E., M.E. (Thermal, Design, Production and Industrial) and Ph.D. programs.

The college and department are committed to provide their students and teachers a quality education environment that combines rigorous academic study and developing a far more ambitious, integrated and influential environment that will best serve the nation.

# **Prologue**

 Composite plates and panels made of Unidirectional composite laminates are increasingly used in thin-walled structural components in aerospace, marine, automobile civil, and offshore structures. These composites have many advantages over traditional metals because of their high stiffness to weight ratio, high strength, resistance of corrosion and damping properties.

• In this 5-day Faculty Development Program, the participant should be able to understand and apply state of the art knowledge of different composite materials in Structural Engineering applications i.e. buildings, bridges, defense industry, aerospace industry, automobile industry, etc.

# **Objective of FDP**

This FDP is designed to meet the following objectives:

- To prepare faculty to be able to guide/train students for project and Lab based mechanics of composite materials.
- To provide a bridge between the industry and academic institution to update their knowledge.
- To provide a platform for Faculty, Research Scholar, Engineers and Students to interact on various aspect of construction, mechanics and characterization of composite materials.
- To enhance faculty skills for academic growth and also make them to conductive

research activity in the field of continuum mechanics.

## **Course Contents**

### FDP will cover:

- Composite Materials
- Smart structures and functional graded materials
- Applications in Structural Engineering
- The behavior of different structural elements such as beam, plates, shells, etc.
- Isotropic, Anisotropic, orthotropic materials
- Prestressed Concrete
- Solid Mechanics- Generalized Hook's law, Energy principles, vibrational principles
- Thermal stresses

# **Course Outcomes**

- This FDP is designed especially for the faculty members to acquire their skills in the composite materials and structures in this emerging area.
- FDP includes theory and numerical practical problems.
- Facilitate insight to different research models and their application in teaching.

- To make the participants realize the importance of composite structures and its applications in various fields as well as to demonstrate some demo projects on specific applications.
- Certificate of participation will be given.





# AICTE –Training and Learning (ATAL) Academy Sponsored 5 Days Training Programme (FDP)

on

"Mechanics of Composite Materials and Structures"

09th-13th September, 2020

# Registration

Please register for this course on AICTE-ATAL Portal

https://atalacademy.aicte-india.org/signupThere is no registration fee.

# **Key Speakers of the FDP**



Prof. Tarun Kant

Department of Civil Engineering IIT Bombay



Department of Mechanical and Industrial Engineering IIT Roorkee.



Prof. S. Pradyumna

Department of Applied Mechanics IIT Delhi



### Dr. Poonam Kumari

Department of Mechanical Engineering IIT Guwahati



### Dr. Chandra Sekher Yerramalli

Department of Aerospace Engineering IIT Bombay



### Dr. Harlal Singh Mali

Department of Mechanical Engineering MNIT Jaipur



### Dr. Atul Kumar Sharma

Department of Mechanical Engineering IIT Jodhpur



### Dr. Prabhat K. Agnihotri

Department of Mechanical Engineering IIT Ropar



### Dr. Rajneesh Sharma

School of Engineering IIT Mandi



### Dr. Harpreet Singh

Department of Mechanical Engineering IIT Goa

# **Dates to Remember**

Course duration: 09th-13th September, 2020

# **Eligibility Criteria**

- The faculty members of the AICTE approved institutions, research scholars, PG Scholars, participants from government organizations and industry.
- On first come first served basis. However, department reserves right to increase seats.

### **Contact for Registration**

Dr. Emarti Kumari
Department of Mechanical Engineering,
MBM Engineering College,
JNV University, Jodhpur
E-mail: embhaskar.mech@jnvu.edu.in
+91-9313532249

### **Committees**

# **Chief Patron**



# Prof. S.K. Ojha,

Dean Faculty of Engineering and Architecture, JNVU, Jodhpur

# **Patron**



# **Prof. Dinesh Shringi,**HOD

Department of Mechanical Engineering

# **Coordinator**

Dr. Emarti Kumari, Assistant Professor (Mech.)

# **Co-Coordinators**

Dr. Kailash Chaudhary, Assistant Professor (Mech.) Mr. Abhisek Gaur, Assistant Professor (CSE) Mr. Amit Meena, Assistant Professor (Mech.)

# **Program Advisors**

Prof. Rajat Bhagwat, Professor Prof. S. K. Singh, Professor Prof. P M Meena, Professor