

## Karnatak Law Society's **GOGTE INSTITUTE OF TECHNOLOGY**

Jnana Ganga, Udyambag, Belagavi -590008 An Autonomous Institution under VTU, Belagavi

# **Department of Mechanical Engineering**

## **CERTIFICATION COURSE OFFERED**



Estd: 1979



# **COMPOSITE MATERIALS**

PREREQUISITES: BASICS OF ENGINEERING MATERIALS AND MANUFACTURING PROCESSES

### **OBJECTIVES:**

- TO UNDERSTAND THE MANUFACTURING PROCESSES OF REINFORCEMENT FIBERS AND MATRICES FOR COMPOSITES.
- TO IMPART THEORETICAL AND PRACTICAL KNOWLEDGE RELATED TO THE FABRICATION OF COMPOSITE MATERIALS
- TEACH PARTICIPANTS HOW TO SELECT APPROPRIATE COMPOSITE MATERIALS FOR SPECIFIC APPLICATIONS BASED ON DESIRED CHARACTERISTICS SUCH AS STRENGTH, FLEXIBILITY, WEIGHT, AND COST.

**BENEFIT:** 

HANDS-ON SKILL DEVELOPMENT ON THE FABRICATION OF COMPOSITE MATERIALS

## **Course content of Composite Materials**

### **Applications of Composite Materials**



### **Introduction to Composites:**

Matrix Materials: Polymers, Metals, Ceramic, Reinforcements: fibers, particulates, flakes. Processing techniques : Hand layup, Metal matrix

Hands on Processing by Hand layup with different fibers, Powder Metallurgy: mixing, compaction, sintering, Liquid-State Processes

> Testing Microstructure, Hardness, Impact, Wear

#### **Key Learnings:** Theory and hands on selection, manufacturing, and testing of composite materials

## Course Instructor: Prof. Mahesh. A Kori (90288 74765)











#### HANDS ON FIBER REINFORCED POLYMERS AND METAL MATRIX COMPOSITES

## AFTER FEE PAYMENT STUDENTS SHOULD FILL THE GOOGLE FORM & SUBMIT THE DETAILS TO CONFIRM REGISTRATION- HTTPS://FORMS.GLE/V6YEAVHWU6TC1IGJ7

LAST DATE FOR REGISTRATION : 15 FEB 2024

#### QR CODE FOR PAYMENT



**MAXIMUM NUMBER OF PARTICIPANTS FOR A COURSE IS 30 REGISTRATION ON A FIRST COME FIRST SERVE BASIS** 

**Course duration: 30 Hrs** Course dates: March 2nd week (Tentative) **Fees for the Certification programs: Rs. 1000 for GIT students Rs. 3000 for Industry participants** 

for Syllabus Link https://drive.google.com/file/d/1hscB7986si6Q\_ajicOrKHoz\_78zwQA1/view?usp=sharing