





#### DEPARTMENT OF MECHANICAL ENGINEERING

## **ACADEMIC YEAR 2022-23 / ODD SEMESTER**

### **VALUE ADDED COURSE REPORT**

As per anna university curriculum, a value addition initiative course has been conducted "smart materials and structures" for third year students on every Saturday. Which enhanced the students' knowledge about different unnormal behavior of certain materials (smart materials) and their engineering applications. Two assessment has been conducted for evaluation and finally E- certificate has been issued through mail.

#### **COURSE DETAILS**

Course: MVA005 – Smart Materials and Structures

Year / Semester: III / V A & B sec

Course duration: 27.08.2022 to 22.10.2022 (30 Periods)

No of students enrolled: 78

No of students completed the course: 78

Course Instructor: Mr. S. Sabanayagam (A Sec)

Mr. H. Agilan (B sec)

Course Incharge: Mr. D. Balaji

Credits: 2

## **COURSE OBJECTIVES**

- > To describe the basic principles and mechanisms of smart materials and devices.
- To enhance the knowledge of physical principles underlying the behavior of smart materials.
- ➤ To understand the basic principles in smart sensors, actuators and transducer technology and mechanisms of measuring techniques with applications.

# **COURSE OUTCOMES:**

Upon the completion of this course the students will be able to

- 1. Classify various smart materials and devices.
- 2. Formulate analytical approach on vibration absorbers.
- 3. Demonstrate strain measurement using smart materials.
- 4. Develop control strategies for smart structures, dampers for health monitoring of structures.

# **COURSE SCREENSHOTS**









# **SAMPLE CERTIFICATE**





T. Ponhpry 21/11/22

HOD/Mechanical (Dr.T.Pushparaj)

J. Munt 11/2026

Principal (Dr.J.Arputha Vijaya Selvi)