

# KRISHNASAMY

College of

## **ENGINEERING & TECHNOLOGY**

Approved by AICTE & Affiliated to Anna University

### **DEPARTMENT OF CIVIL ENGINEERING**

Date: 20.02.2024

#### **CIRCULAR**

Ref.: KCET/CIVIL/VAC/CIRCULAR/2023-24/02.

The following Value-Added Course will be conducted during the academic year 2023-2024. The course will be conducted in two phases from 21.02.2024 to 24.02.2024 and from 28.02.2024 to 01.03.2024. Students are instructed to register their names for the course allotted to them.

## Note: Students are instructed to attend the program without fail.

S. No.	Course Code	Name of the Course	Year / Sem	No. of Period	Course Coordinator
1	CE- VAC2302	Basic Measurements Of Construction Work	II / III	30	Er.C.Sureshkumar AP/Civil

HoD/CIVIL

Vice-Principal

Principal



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#### **SYLLABUS**

**COURSE CODE** 

CE-VAC2302

**COURSE NAME** 

Repair works.

BASIC MEASUREMENTS OF CONSTRUCTION WORK

### **COURSE OBJECTIVES**

- To provide an overview about the principles of measurements of construction work.
- To understand and apply the fundamentals of measurements in surveying.
- To understand the area and volumetric measurements of concreting work
- To enhance the knowledge of protection of structures.
- To understand the need of maintenance of structures.

### Module I: Introduction Introduction of units - SI units - Building measurements - Road measurements - Area calculation - Volume calculation of construction work\. Module II: Equipment for Measurements 6 Linear measurement - 2D Measurement - 3D Measurement - Chain - Types -Application-Tape - Types-application - Current technology for measurements. **Module III: Structural Construction Works** 6 Earth work - Sand filling - PCC - RCC - Beam - Types- Column- Types- DPC- wall-Roof - Floor **Module IV: Non-structural Construction Works** 6 Plastering - Painting- Centering- Shuttering - Filling and Refilling of soil - Storage place - Flooring. Module V : Maintenance Work Repair and rehabilitation of construction work-wall-beam-roof-floor-New Technology in

Total No. of Periods

### **COURSE OUTCOMES**

At the end of the course the student will be able to

- Introduce the rudiments of various measurements and its principles.
- Imparts knowledge in computation of area of terrain and ground features by suitable equipment's
- Imparts concepts of operations to construction structural components.
- Understand the procedure for establishing various construction work
- Imparts the knowledge on maintenance of structures.

#### REFERENCES

- R. Subramanian, Surveying and Levelling, Oxford University Press, Second Edition, 2012.
- K. R. Arora, Surveying Vol I & II, Standard Book house, Twelfth Edition 2013.

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