# 10 ME 41E WORK STUDY IV B.Tech I Semester

(with effect from the academic year 2013-2014)

Lectures/week: 4 Hrs University Exam:3 Hrs Credits: 4 Sessional Marks: 40 End Examination Marks: 60

## UNIT - I

Introduction to work study- Scientific management- Productivity. Advantages of work study.work study and workers – work study and management

#### UNIT - II

Method Study: Introduction- Significance of process charts. Critical Examination- Identification of key activities of exercises on process charts - Flow diagrams - String diagrams - travel chart.

### UNIT - III

Micro motion analysis- Memo motion films – Therbligs - Principles of Motion Economy: Work place layout – Human body – Design of tools and equipment.

#### UNIT - IV

Work Measurement: Work measurement techniques- Rating- Allowances- Standard time - problems on Standard time and Rating - Introduction to Synthetic data- Activity sampling Analytical estimating - PMTS- Work factor- MTM.

#### UNIT - V

Job Evaluation- Techniques of job evaluation- Merit rating- Fatigue – Ergonomics – Ergonomics applied to work place layout.

## **TEXT BOOKS:**

1. Introduction to Work Study	: International Labour Organisation.
2. Elements of Work Study and Ergonomics	: Dalela Etal, Standard Publications.

## **REFERENCES:**

- 1. Motion and Time Study Design and Measurement of Work : Ralph M. Barnes
- 2. Work Study : Khanna O.P