



# THE FEDERAL UNIVERSITY OF TECHNOLOGY, AKURE

## *Department of civil Engineering*

### **CVE 502 – Engineering Management**

#### **CDDDCOURSE PARTICULARS**

**Course Code:** CVE 502

**Course Title:** Engineering Management

**No. of Units:** 3

**Course Duration:** Two hours of theory and one hour of tutorial per week for 15 weeks

**Status:** Compulsory

**Course Email Address:**

**Course Webpage:**

**Prerequisite:** NIL

#### **COURSE INSTRUCTORS**

**Engr. O. Adeniyi**

*First Floor; SEET Building*

*Dept. of Civil Engineering*

*Federal University of Technology, Akure, Nigeria.*

**Phone:** +2348044560792

**Email:**

#### **COURSE DESCRIPTION**

This course is an explanatory first course in management in engineering and allied Industry.

It has a focus of impacting useful understanding of varied natures of each resource and behavioural pattern when all are combined in production system. The theory shall be embedded with tutorial sessions/cases studies.

## COURSE OBJECTIVES

The objectives of this course are to:

- introduce students to variety of structural factors, environmental factors of the business place, exigent development factors of competitive industry etc and evaluate how all mix with human factors in the decision making .
- apply the principles and theory of management and other management disciplines like accounting, production, marketing, human resources and operations management for optimum economic efficiency in engineering industry.
- develop students in using the accumulated technical knowledge, sense of analysis, and creative design abilities in various ways that can contribute to the development of a more satisfying life and environment in the industry.

## COURSE LEARNING OUTCOMES / COMPETENCIES

Upon successful completion of this course, the student will be able to:

- cover the essential fundamental of industrial engineering management-be it at any of contractor, consultant and client levels. But it is emphasised that each has its own individual problems that pertain to its intrinsic nature and goals, the solution of which necessitates some adaptation of the general principles enunciated in the course.
- review with hindsight the performance he observed at the Industry/establishment where he did industrial Training and correlate the meaning of performance level, industrial problems etc as embodying the organizational strategy being used.

## GRADING SYSTEM FOR THE COURSE

This course will be graded as follows:

Class Attendance	5%
Assignments	10%
Test(s)	15%
<u>Final Examination</u>	<u>70%</u>
<b><u>TOTAL</u></b>	<b><u>100%</u></b>

## GENERAL INSTRUCTIONS

**Attendance:** It is expected that every student will be in class for lectures and also participate in all practical exercises. Attendance records will be kept and used to determine each person's qualification to sit for the final examination. In case of illness or other unavoidable cause of absence, the student must communicate as soon as possible with any of the instructors, indicating the reason for the absence.

**Academic Integrity:** Violations of academic integrity, including dishonesty in assignments, examinations, or other academic performances are prohibited. You are not allowed to make copies of another person's work and submit it as your own; that is plagiarism. All cases of academic dishonesty will be reported to the University Management for appropriate sanctions in accordance with the guidelines for handling students' misconduct as spelt out in the Students' Handbook.

**Assignments and Group Work:** Students are expected to submit assignments as scheduled. Failure to submit an assignment as at when due will earn you zero for that assignment. Only under extenuating circumstances, for which a student has notified any of the instructors in advance, will late submission of assignments be permitted.

**Code of Conduct in Lecture Rooms and Laboratories:** Students should turn off their cell phones during lectures. Students are prohibited from engaging in other activities (such as texting, watching videos, *etc.*) during lectures. Food and drinks are not permitted in the laboratories.

## READING LIST

1. Richard stone; Ed. management of Engineering Projects, Macmillan London, 1988
2. Stuckenbruck. L.C., The implementation of Projects Management; The professionals Handbook, Addison-Wesley, London
3. O'Connor, P.T., The practice of Engineering Management A new approach.
4. Woodward, J.F., Quantitative method in construction Management and design
5. Radford, J.D., Richardson. D.B., The management of manufacturing systems

## COURSE OUTLINE

Week	Topic	Remarks
1	Management of engineering project environment	
2	Formation of company. Sources of finance, money and credit. Insurance. National Policies, GNP growth rate and prediction	
3	Organizational management. Management by objectives	
4	Personal management, selection, recruitment and training	
5	Job evaluation	
6	Industrial psychology – individual and group behaviour	
7.	The learning process and motivational factors	MID-SEMESTER TEST
8	Resource management	
9	Planning and decision making	
10	Forecasting, scheduling. Production control	
11-12	Ganttchart. CPM and PERT. Optimization methods	
13	Transport and materials handling	
14	Workstudy and production processes	
15	Revision	This is the week preceding the final examination. At this time, evaluation will be done to assess how far the students' expectations for the course have been met.