

Liverpool John Moores University

Title: BUILDING MAINTENANCE
Status: Definitive
Code: **5506ICBTBS** (126992)
Version Start Date: 01-08-2021

Owning School/Faculty: Civil Engineering and Built Environment
Teaching School/Faculty: ICBT, Colombo

Team	Leader
Alison Cotgrave	Y

Academic Level: FHEQ5 **Credit Value:** 15 **Total Delivered Hours:** 62
Total Learning Hours: 150 **Private Study:** 88

Delivery Options

Course typically offered: Semester 2

Component	Contact Hours
Lecture	45
Tutorial	15

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Essay	AS1	Assignment (1500 words)	30	
Exam	AS2	Examination	70	2

Aims

Aim(s) of the module is to understanding on processes of ensuring the buildings' standard performance level.

Learning Outcomes

After completing the module the student should be able to:

- 1 Describe the concepts of effective maintenance of plant and equipment and its objectives.
- 2 Describe the key elements in an effective maintenance programme.
- 3 Recognise the benefits of maintenance and maintenance significant items.
- 4 Apply concepts of acquiring best plant and equipment at replacement.

Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

Assignment	2		
Examination	1	3	4

Outline Syllabus

Introduction to Maintenance Management

Concepts of effective maintenance of plant and equipment, Objectives of Maintenance, Maintenance Costs, Measurement of Maintenance Efficiency

Maintenance Definitions

Preventive and Corrective Maintenance, Breakdown Maintenance, Subjective and Objective, Condition Monitoring, Planned and Unplanned Corrective Maintenance

Maintenance Procedures

Different maintenance procedures, The Maintenance Strategy,

How to get Unplanned Repair Jobs Planned

Use of condition monitoring, How Preventive Maintenance influences overall economics, Maintenance windows, Maintenance Ineffectiveness Factor

Failure Development, Maintenance Procedures

Individual Lifetimes, Failure developing times, Failures and their development

Total Productive Maintenance

Introduction, Implementation of TPM, TPM – philosophy and goals

Maintenance Management Systems

General maintenance systems, Structure and flow of a maintenance Management System

Contents in a Maintenance Management System

Preventive Maintenance system, Planning system, Work Order routines, Plant and unit record, Inventory and spare part control system, Purchasing system, Document record system.

Inspection Systems in Maintenance Management

Role and attributes of an inspection system, Developing and implementing an inspection schedule

Learning Activities

Students will be supported in their learning, to achieve the above learning outcomes, in the following ways:

By a series of lectures and practical approach

A recommended resource list - indicating key reading, virtual and physical learning assistance, is provided to help enable students to undertake self-directed study.

Notes

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