## **Subject Description Form**

Subject Code	BSE554					
Subject Title	Maintenance Management of Built Assets					
Credit Value	3					
Level	5					
Pre-requisite/ Co-requisite/ Exclusion	Nil					
Objectives	The role of physical assets as an enabling resource is not obvious to many owners in both the public and private sectors. A growing corporate awareness of the need to manage their property assets and occupancy costs has resulted in greater professionalism in the area of maintenance management of built assets. This subject aims to provide the students with a clear understanding the key issues of maintenance management in the FM context so that they can clearly understand:					
	<ul> <li>the strategic importance of the enabling role of physical assets to organisations in the public or private sector;</li> </ul>					
	• the definition of the standard of care in terms of building maintenance as part of a whole-life asset management approach covering life cycle considerations, functional and compliance requirements for both building fabric and engineering services in buildings;					
	• the need to adopt a proactive approach to the management of maintenance of built assets (both fabric and services components) covering demand assessment, planning and prioritisation, budgeting and adequate information systems;					
	• the components of an effective maintenance management process, including options and tools for measurement, review and improvement of maintenance performance.					
Intended Learning Outcomes	Upon completion of the subject, students will be able to:					
	a. develop competence for managing built assets for organisations in the public or private sector;					
	b. identify appropriate standard of care, life cycle considerations, functional and compliance requirements for both building fabric and engineering services in buildings;					
	c. take a proactive approach covering demand assessment, planning and prioritisation, budgeting and adequate information systems in managing the maintenance of built assets;					
	d. apply appropriate tools for measurement, review and improvement of the performance of built asset maintenance.					

Subject Synopsis/ Indicative Syllabus	The subject comprises five sections:					
	Section 1 – Introduction					
	Objectives of subject and relationship with FM programme					
	Unit outline and assessments					
	Historical background and contemporary issues					
	Context and role of built assets maintenance					
	Section 2 – Scoping of Maintenance Function and Demand in Buildings					
	Essence of maintenance in built assets life cycle					
	Problems with managing built assets maintenance					
	Maintenance standards and information					
	Maintenance policy, strategy and organization: options and designs					
	Basics of regulatory controls on built assets maintenance					
	Section 3 – Essentials of Built Assets Maintenance Management					
	Maintenance planning, budgeting and control					
	Assessing asset conditions and prioritizing maintenance activities					
	Maintenance information management systems					
	Options and trends of managing built assets maintenance					
	Tools for managing maintenance performance, and designs and case					
	studies for maintenance management					
	Maintenance review, feedback and improvement					
	Section 4 – Assignment or test					
	Section 5 – Seminars/workshops					
Teaching/Learning Methodology	Delivery of the subject entails a series of lectures, a workshop and a seminar:					
methodology	• The lectures introduce the key subject elements and explanation of the relevant concepts, principles, cases and examples.					
	• The workshop allows students to make use of the knowledge they learned from the lectures to tackle some selected problem cases in the subject area.					
	• The seminar enables students to practice their presentation skills and encourages them to interactively communicate and discuss with their peers.					

Assessment Methods in Alignment with	Specific assessment methods/tasks									
Intended Learning Outcomes			a.	b.	C.	d.				
	1. Assignment / test	20%	~	~						
	2. Workshop / seminar	30%		~	~					
	3. Examination	50%	~	✓	~	~				
	Total	100%								
	Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:									
	i) The assignment / test, requiring the students to demonstrate their ability in attaining the intended outcomes a) & b), is an interim assessment on their individual learning progress.									
	<ul> <li>The workshop / seminar, to be held among different groups of students, is to assess their ability of knowledge application through cooperation and teamwork.</li> </ul>									
	iii) The examination, carrying the largest assessment component, is to assess the overall ability of individual students in attaining the various intended outcomes.									
Reading List and References	Armstrong, J. & Saville, A., (2005). <i>Managing your building services</i> , The Chartered Institution of Building Services Engineers.									
	Canter, B. & Swallow P. (2007). <i>Building Maintenance Management</i> , Blackwell Publishing.									
	Harris, J. (2016). Business-focussed maintenance, BSRIA Publications.									
	Marsh, C. (2003). Building Services Procurement, Spon Press.									
	RICS. (2009). <i>Building Maintenance: Strategy, Planning and Procurement</i> , RICS Guidance Note.									
	Wood, B. (2003). Building Care, Blackwell Publishing.									
	Wordsworth, P. (2003). Lee's Building Maintenance Management, Wiley-Blackwell.									