## Subject Description Form

Subject Code	BSE5512				
Subject Title	Economics for Facility Management				
Credit Value	3				
Level	5				
Pre-requisite/ Co-requisite/ Exclusion	Must have an understanding of the role and function of facility management as a profession and in the industry.				
Objectives	The role of physical assets as an enabling resource is not obvious to many owners in both the public and private sectors. The dynamic nature of national and international economies has had the impact of raising corporate awareness to the need to manage and optimize their premises occupancy costs and life-cycles of operational assets. The key objective of this subject is to raise awareness, and fully understanding the impact of facility-related decisions on the business performance of organizations in terms of its role as a supporting physical resource that enables the achievement of organizational objectives.				
Intended Learning Outcomes	<ul> <li>On successful completion of this subject, students will be able to:</li> <li>a. have a clear understanding of basic economic concepts and financial variables underpinning facility-related decisions in facility management;</li> <li>b. appreciate the significance of time value of money as a basis of economic evaluations; undertake life-cycle evaluations as a tool to decide between alternative options and apply a life cycle approach in asset management;</li> <li>c. critically examine and analyse the components of premises occupancy costs associated with the provision, and on-going costs of support services and utilities in buildings, as a business resource;</li> <li>d. adopt a proactive approach in facility budget preparation and justification within a corporate setting;</li> <li>e. adopt measures to ensure a proactive approach in managing facility requirements to meet changing business requirements.</li> </ul>				
Subject Synopsis/ Indicative Syllabus	<u>Subject Summary:</u> The focus of this subject is an appreciation of economic evaluations and financial management and their applications in facility management. In particular, attention is given to economics of acquiring and operating business premises and procurement of non-core facility services. Facility-related decisions impact on business operating costs directly, their financial implications on the organisation's viability is a critical component of facility management. The economic and financial drivers are to provide buildings that are functional, safe, fit for use and adaptable to the users' tasks, as well as, being economically viable throughout their operational lives. The subject philosophy integrates building facilities as a key economic resource in the fulfilment of business objectives. It is the systematic management of all decision-making processes taken throughout the life of the physical asset.				

	The subject is comprised of three sections:							
	Section 1 - Importance of Economics in Facility Management							
	Objectives of subject and relationships with FM course structure							
	<ul> <li>Basics of Economic Evaluations – NPV, Annual Equivalent, Simple &amp; Discounted Payback, LCC, Internal Rate of Return, Benefits-to-cost Ratio, Savings-to-Investments ratio, etc.</li> </ul>							
	<ul> <li>Basics of Building Economics – Asset life cycle, Ownership versus Leasi</li> <li>Economic basis of Outsourcing / Contracting out of facility services</li> <li>Section 2 - Economics of Facility's Occupancy Costs (Theory)</li> </ul>							
	Basics of Financial Management - The context of FM Costs in Financial Statements							
	Understanding and Managing Asset/Component Life Cycle Costs							
	Building Renewal, Obsolescence and Depreciation of Buildings							
	Section 3 - Managing Facility's Occupancy Costs (Practice)							
	<ul><li>Components of Occupancy Costs</li><li>Components of Management Framework</li></ul>							
	Best Practice Review – Case Studies							
Teaching/Learning Methodology	Subject/lecture material is provided only as a base for the student's further study/research. Assignments and final examination will be assessed on this basis.							
	Based on lecture material/direction, students will be expected to undertake research into the various parts of the subject. A high level of student involvement/interaction and independent research is mandatory. It is assumed that students will attend all the classes and will participate actively in class discussions. Attendance of the full-day workshop is essential for students taking the subject.							
	Lectures/case studies							
	<ul> <li>Seminars and Workshops</li> <li>Independent study</li> <li>Assignment preparation</li> <li><u>Assessment:</u></li> </ul>							
	Continuous assessment 60%							
	Examination 40%							
Assessment Methods in Alignment with Intended Learning	Specific assessment methods/tasks% weightingIntended subject learning outcomes to be assessed (Please tick as appropriate)							

Outcomes			a.	b.	C.	d.	e.		
	1. Essay Assignment	30%	✓	✓	✓				
	2. Workshop	30%			✓	✓	✓		
	3. Examination	40%	✓	✓	✓	✓	✓		
	Total	100%							
	<ul> <li>i) The essay assignment is designed to assess the students' individual ability in attaining the intended outcomes a), b) &amp; c), as an interim assessment on their individual learning progress.</li> <li>ii) The interactive workshop (facilitated by experienced professionals) is designed to encourage group discussion and exchange of experience via realistic case scenario. It is used to assess students' ability of knowledge application and presentation skills.</li> <li>iii) The written examination is to assess the overall ability of individual students in attaining the various intended outcomes.</li> </ul>								
Reading List and References	Cotts, D. & Rondeau, E. (2003). <i>The Facility Manager's Guide to Finance and Budgeting</i> . AMACOM, New York. (ISBN 0-8144-0562-2)								
	Hodges, C. & Sekula, M. (2013). Sustainable Facility Management - The Facility Manager's Guide to Optimizing Building Performance, CreateSpace Independent Publishing Platform. (ISBN: 978-1492769590)								
	<ul> <li>Miller, R., Casey, M., &amp; Konchar, M. (2014) Change Your Space, Change Your Culture: How Engaging Workspaces Lead to Transformation and Growth. Wiley. (ISBN: 978-1118937815)</li> <li>Pheng, L. (2018). Project Management for the Built Environment: Study Notes. Springer. (ISBN: 978-9811069918)</li> </ul>								
	<ul> <li>Ruegg, R.T. &amp; Marshall, H. E. (1990). Building Economics – Theory and Practice. Van Norstrand Reinhold. (ISBN 0-442-26417-8)</li> <li>Sowell, T. (2014). Basic Economics, 5<sup>th</sup> ed., Basic Books, (ISBN: 978-0465060733)</li> <li>Then, D.S.S. &amp; Tan, T.H. (2013). Facilities Management and the Business of Managing Assets, Routledge. London &amp; New York. (ISBN: 978-0-415-27494-4)</li> </ul>								
	Williams, B. (2001). <i>Facilities Economics.</i> Building Economic Bureau Ltd (ISBN 0-904237-23-0)								