

GUJARAT TECHNOLOGICAL UNIVERSITY

M. E. Construction Management (Branch Code - 49)

Year – II (Semester – III) (W.E.F. June 2013)

Subject: Elements of Value Engineering (734902)

Sr. No.	Course Content	Hours
1	Introduction	
	(i) Concept and definition, objectives of Value engineering ,Advantages of Value methodology ,Scenario of value engineering with context to India, Origin of Value engineering (ii) Quantity surveying and value engineering ,team of value engineering and its quality, Applicability to Mega projects, Value engineering and project management	10 10
2	Value Analysis.	
	Concept ,Job planning and its importance in value engineering ,Various phases of Value Engineering -Information Phase, Function Analysis Phase, Creative Phase ,Evaluation Phase , Development Phase	10
	Functional Analysis: Functions at various levels and of various types, cost and worth of function , importance of functional analysis, FAST Diagramming –How to prepare,	08
3	Cost Model	
	Introduction , Value, Cost and Worth , True and Poor value, Factors affecting the value , Value Index, Cost and Value Gap, importance of cost model in Value Engineering , Function and Matrix Cost model, Life cycle cost analysis	10

Tutorials:

1. Assignment work is based on above subject contents.

Reference:

1. Value Analysis in Design and Construction by O' Brien, J.J. - Mc Graw Hill
2. Value Engineering: Theory by Donald E. Parker - Soundaram Publishers1.
3. Value Methodology: A Pocket Guide to Reduce Cost and Improve Value Through Function Analysis; Lawrence D Miles Foundation
4. Lomansh, S. Value Management: A Textbook, 1997 – Sterling Publishers (Pvt.) Ltd., New Delhi
5. Web reference as per the Faculty guidance and recommendations