

TE651: Transportation Economics and Project Evaluation

Teaching Scheme			Credits	Marks Distribution				Total Marks
L	T	P		Theory Marks		Practical Marks		
			ESE	CE	ESE	CE		
3	2	0	5	70	30	30	20	150

Course Content:

Sr. No	Topics	Teaching Hrs.
1	<p><u>Principles:</u></p> <p>Purpose and major considerations in Transport economics. Analysis, Identification and measurement of transportation cost and benefits.</p>	12
2	<p><u>Cost and Benefits:</u></p> <p>Capital Cost, Inflation cost, Interest during construction, maintenance cost, Road user cost, Vehicle Operating cost, Accident Cost, Congestion Cost, and Pricing. Non user cost and consequences. Saving and Benefits, Road user benefits, and Consumer surplus. Social Costs and benefits from transportation projects.</p>	12
3	<p><u>Methods of Economic Analysis:</u></p> <p>Characteristics and basic understanding of methods, Comparison and Limitations of various methods. Ranking of independent alternative projects.</p>	12
4	<p><u>Techno Economic Feasibilities Studies and Evaluation of Alternative Projects:</u></p> <p>Welfare Economics, Evaluation and appraisal of transport investments. Special Considerations for transportation economics in analysis for developing countries. Independent alternative projects.</p>	12
Total Hrs.		48

Reference Books:

1. Heggie I. G., “*Transport Engineering Economics*”, MC Graw Hill.
2. Harison, “*The Economics of Transport Appraisal*”, Croom Helm , London.
3. Alder A, “*Economic Appraisal of Transport Projects*”.
4. Garber and Hoel, “*Traffic & Highway Engineering*”, West Publishers.

5. IRC SP 30, "Manual on Economic Evaluation of Highway Projects".
6. Baker, "*Hand book of Highway Engineering*", Van Nostrand.
7. Mishra Sasmita, "*Engineering Economics and Costing*" Second revision, PHI Learning Private Limited, 2014.