

## CE541: Research Methodology in Civil Engineering

Teaching Scheme			Credits	Marks Distribution				Total Marks
L	T	P		Theory Marks		Practical Marks		
				ESE	CE	ESE	CE	
1	0	2	3	70	30	30	20	150

### Course Content:

Sr. No.	Topics	Teaching Hrs.
1	Introduction to research methodology.	01
2	Importance of research in decision Making.	01
3	Defining research problem and formulation of research problem.	02
4	Research designs: Exploratory, Descriptive, And Experimental.	02
5	Data collection and measurement:-Methods and techniques of data collection: Primary data through communication, Designing Questionnaire, Qualitative Research, sampling and sampling designs Attitude measurement and scales.	03
6	Data presentation and analysis: Data processing, Univariate and Bivariate analysis, Correlational analysis ANOVA, Analysis of Associations, Multivariate analysis and data, Model building and decision making.	05
7	Report Writing and presentation: Content of reports, formatting of content, and presentation of reports.	01
<b>Total Hrs.</b>		<b>15</b>

### Reference Books:

- 1 C.R. Kothari. *"Research Methodology - Methods and Techniques"*, 2<sup>nd</sup> Edition, New Delhi, New Age International (P) Limited, 2003.
- 2 Eileen M. Trauth. *"Qualitative Research in IS: Issues & Trends"*, USA/London: IDEA Group Publishing, 2001. (ISBN: 1-930708-06-08).