

# RESEARCH METHODOLOGY

## Course Outline

Session	Topic
<b>Session 1 (2 Hours)</b>	<b>Fundamentals of Research</b> <ul style="list-style-type: none"><li>- Objective of Research</li><li>- Characteristics of Research</li><li>- Types of Research<ul style="list-style-type: none"><li>- Descriptive Vs Analytical</li><li>- Applied Vs Fundamental</li><li>- Quantitative Vs Qualitative</li><li>- Conceptual vs. Empirical</li></ul></li></ul>
	<b>Steps Involved in Research Process</b> <ul style="list-style-type: none"><li>- Identifying the Research Problem</li><li>- Literature Survey</li><li>- Research Hypothesis</li><li>- Research Design</li><li>- Data Collection</li><li>- Data Analysis</li><li>- Hypothesis testing / Model building</li><li>- Generalization, Interpretation and Report</li></ul>
	<b>Research Methodology for Data Science</b>
	<b>Organization of Journal / Thesis</b> <ul style="list-style-type: none"><li>- ABSTRACT writing</li><li>- Introducing the scope of the Research</li><li>- Documenting Literature Survey</li><li>- Materials and Methods</li><li>- Results and Discussion</li><li>- Conclusion</li><li>- Appendix</li><li>- Reference</li></ul>
	<b>Choice of Journal</b> <ul style="list-style-type: none"><li>- Types of Journals</li><li>- Journal Metrics</li><li>- Journal Citation</li><li>- Peer review journal</li></ul>
	<b>Conference Vs Journal Publication</b>
	<b>Publication Ethics</b> <ul style="list-style-type: none"><li>- Plagiarism</li><li>- Self-Plagiarism</li><li>- Reference</li><li>- Projecting correct numbers</li></ul>
<b>Session 2 (2 hours)</b>	<b>Discussion on Assignment solution and feedback</b>