



KARNATAKA SCIENCE AND TECHNOLOGY ACADEMY

Department of Science and Technology, Govt. of Karnataka

And

VISVESVARAYA TECHNOLOGICAL UNIVERSITY [VTU]

Belgaum

FIVE DAY WORKSHOP ON

“RESEARCH METHODOLOGY AND DATA ANALYSIS”

Date: Dec. 13-17, 2022 (Tuesday-Saturday)

Venue: KSTA Auditorium | Time: 10:00 AM- 5:30 PM

Program Schedule

DAY -1: Dec. 13, 2022 [Tuesday]		
10.00 am - 11.30 am: Inauguration		
Time	TOPICS	RESOURCE PERSON
11.30 am 05.30 pm	Basic Concepts in Research Methodology <ul style="list-style-type: none">• Introduction, Meaning of Research, Objectives, Approaches• Types of Research & their Significance• Research Process, Scientific Method in Research• Research Problem, Criteria of Good Research & Problems of Researchers	Prof. Uttam Kumar IIIT, Bangalore
Tea /Coffee and Lunch breaks will be given		
DAY - 2: Dec. 14, 2022 [Wednesday]		
10.30 am 01.30 pm	Literature review & Source of Information <ul style="list-style-type: none">• Importance of Literature reviews in defining Research Problem• Identifying the gap areas from	Ms. Indu Solomon, Research Scholar, Center for Data Sciences, IIIT Bangalore

	literature review, Short listing Reviews Style	
01.30 pm - 02.30 pm - Lunch Break		
02.30 pm 05.30 pm	<ul style="list-style-type: none"> • Sources of Information (Primary & Secondary Sources) • Developing a conceptual framework • Need & Meaning of Research Design 	Prof. Uttam Kumar IIIT, Bangalore
DAY-3: Dec. 15, 2022 [Thursday]		
10.30 am 01.30 pm	Design of Sample Surveys & Data Collection <ul style="list-style-type: none"> • Introduction to Sampling Design, Sampling & Non-Sampling Errors • Sample Survey versus Census Survey, Types of Sampling Designs 	Ms. Madhurima Panja Research Scholar, Center for Data Sciences, IIIT Bangalore
01.30 pm - 02.30 pm - Lunch Break		
02.30 pm 05.30 pm	<ul style="list-style-type: none"> • Qualitative & Quantitative Research (Observation, Focus Group, Projective Techniques, Descriptive Research, Survey Methods, Experimentation Research v/s lab experiments) • Selection of Appropriate Method for Data Collection & Case Study Method 	Dr. Tanujit Chakraborty Mphasis Research Fellow Center for Data Sciences IIIT Bangalore
DAY 4: Dec. 16, 2022 [Friday]		
10.30 am 01.30 pm	Testing of Hypothesis & Data Analysis <ul style="list-style-type: none"> • Basic Concept of Testing of Hypothesis, Test Statistics & Critical Region • Procedure of Hypothesis Testing, Mean, Proportion, Variance • P-Value approach, Power of Test & Limitations 	Dr. Tanujit Chakraborty Mphasis Research Fellow Center for Data Sciences IIIT Bangalore
01.30 pm - 02.30 pm - Lunch Break		
02.30 pm 05.30 pm	<ul style="list-style-type: none"> • Chi-square Test, Correlation & Regression • Parametric & non-parametric tests • Introduction to statistical concepts & its application for Data Processing • Individual Hands-on training with R-Software • Exposure Visit to Some of 	Dr. Tanujit Chakraborty Mphasis Research Fellow Center for Data Sciences IIIT Bangalore

	Reputed Research Laboratories in Bengaluru	
DAY 5: Dec. 17, 2022 [Saturday]		
10.30 am 01.30 pm	Interpretation & Report Writing <ul style="list-style-type: none"> • Research Proposal Writing, Structure of Scientific Research Paper/Article • Research Report Writing Structure • Thesis & Dissertation, Research Presentation Techniques 	Ms. Anindita Dasgupta, Research Scholar, Center for Data Sciences, IIIT Bangalore
01.30 pm - 02.30 pm - Lunch Break		
02.30 pm 04.30 pm	<ul style="list-style-type: none"> • Latex and Bibliography management • Research Proposals and Grant Writing • Intellectual Property Rights (IPR) & IPR Systems in India 	Ms. RahishaThottolil, Research Scholar, Center for Data Sciences, IIIT Bangalore
04.30 pm - 05.30 pm: Valedictory		