



**B.V. Patel Institute of Management,
Uka Tarsadia University**



Date: 03-12-2021

Certificate Course on Basics of Research Methodology and SPSS

Objective: The objective of the course is to increase knowledge and requisite skills of basics of research methodology and use of SPSS and allow them to work independently with SPSS on their own data and provide a solid foundation for advanced data analysis work.

Course Outcome: By the end of the course, students will be able to:

- Describe and classify data using statistical terminology.
- Use SPSS to conduct basic descriptive analyses and graphical presentations.
- Define the null and alternative hypothesis and know when to use basic statistical hypothesis tests.
- Interpret p values and confidence intervals.

B. V. Patel Institute organised Certificate Course on Research Methodology and SPSS for TYBBA students from 29-11-2021 to 03-12-2021. Total 40 students participated in the 5 days course.

Schedule:

Week	Subject	Resource Person	No. of Hours
29/11/2021	Basics of Research Identifying Research Problem Questionnaire design	Mr. Dharmaraj Solanki Dr. Anuradha Pathak	09:00 am to 03:00pm
30/11/2021	Introduction of SPSS Scale of Measurements, Getting to Know SPSS How to Prepare the Data file	Dr. Manisha Surti, Mr. Vivek Ayre	09:00 am to 03:00pm
01/12/2021	Hypothesis Testing Parametric test,	Dr. Mukesh Patel	09:00 am to 03:00pm
02/12/2021	Time Series Analysis and Factor Analysis	Dr. Taral Patel Mr. Nisarg Shah	09:00 am to 03:00pm
03/12/2021	Hypothesis Testing Non - Parametric test	Dr. Mukesh Patel	09:00 am to 03:00pm

Co-ordinator: Mr. Nisarg Shah & Ms. Nimisha Jariwala

Day:1 Basics of Research by Mr. Dharmaraj Solanki and Dr. Anuradha Pathak

Mr. Dharmaraj Solanki enlightened students on the basics of research. The initiation in the research is the problem identification. Problem analysis was explained in detail. The best part of the workshop was simplifying all basic concepts with examples. All theoretical aspects were explained thoroughly.

Dr. Anuradha Pathak covered questionnaire structural design. The best part of the session was the practical approach and clarification of methods and techniques useful for questionnaire formation. All basic concepts are enumerated with examples.



Day 2: Introduction of SPSS by Dr. Manisha Surti & Mr. Vivek Ayre

Mr. Vivek Ayre enlightened students with the scale of measurements. Identification of the type of data is essential for further research. It is a very important step of the research to choose an appropriate scale of measurement. The best part of the session was the practical approach, real life examples and clarification of all the scales.

Dr. Manisha Surti demonstrated to students about SPSS and data entry. It is a very important step of the research to prepare a data file and she has covered this topic meticulously. The best part of the session was the practical approach and clarification of the statistical software.



Day 3: Hypothesis Testing - Parametric Test by Dr. Mukesh Patel

Dr. Mukesh Patel has covered Hypothesis Testing - Parametric Test. He has covered various parametric tests such as Two-sample t-test, Paired t-test, Analysis of variance (ANOVA), Pearson coefficient of correlation theory as well as demonstration of the same on SPSS. It was an informative and knowledge seeking session. Students also enjoyed the session.



Day 4: Factor Analysis and Time Series Analysis by Dr. Taral Patel and Mr. Nisarg Shah

Dr. Taral Patel and Mr. Nisarg Shah jointly took part in this session. They have covered theory of Factor Analysis and step by step procedure of the same in SPSS through demonstration in the first half. Students also understand why Factor Analysis is done and when to use it.

In the Afternoon session, Dr. Taral Patel has covered Time Series Analysis. He has covered curve fitting, descriptive analysis, exploratory analysis with practical examples. Both of the sessions were very informative and students learned about various tests applied for secondary data and getting knowledge regarding how to interpret different values.



Day 5: Hypothesis Testing - Non-Parametric Test by Dr. Mukesh Patel

Non parametric tests are useful when the data is not normal. Sir has covered various non-parametric tests, when to use it and how to interpret each one. He has also demonstrated each test in SPSS.

In every session, students have also performed hand on with the help of SPSS, where faculty provide them data and students did hand on for the same.

Overall Certificate Course was successful, where students gave positive feedback and students also enjoyed the whole 5 days.

