

FACULTY DEVELOPMENT PROGRAMME  
ON  
DATA ANALYTICS  
FOR  
RESEARCH  
(21-25 June' 2021)



**IIM SIRMAUR**  
KNOWLEDGE . LEADERSHIP

Organized by  
Indian Institute of Management  
Sirmaur



## OBJECTIVES

Since last few decades, the importance of data analysis and interpretation has increased manifold in academic and practionaer domains. However, there exists a number of issues that inhibits the application of research methods and techniques ranging from problem identification to the type of research techniques required to analyse the data and the interpretation of the results so achieved. Therefore, the prime objective of this programme is to tackle these issues by equipping the programme participants with the requisite knowledge for identifying the right research problem, selection of adequate data analysis techniques, application of those research techniques, and interpretation of results.

## TOPICS TO BE COVERED

1. Problem Identification, Research Designs and Hypothesis Development
2. Data collection and cleaning
3. Basics of Statistics
4. ANOVA
5. Factor Analysis
6. Logistic and Multiple Regression Analysis
7. Discriminant Analysis

## 8. Conjoint Analysis

**Exposure to Software:** Participants would be given a hands on training on the tools like **SPSS**.

## ABOUT THE INSTITUTE

IIM Sirmaur is situated in the verdant surroundings of Himalayas (located in Paonta Sahib and nearby to Dehradun). IIM Sirmaur provides an ideal setting to educate and train the best minds of the country, away from the hustle and bustle of metropolitan cities. IIM Sirmaur is one of the 3<sup>rd</sup> generation IIMs set up by MHRD, Govt. of India.

Paonta Sahib is among the major industrial towns of Himachal Pradesh. The town is an important religious place for the Sikhs, and it attracts pilgrims from around the world. The campus is equipped with modern facilities and latest technology to provide an excellent learning environment for the students. The institute has state-of-the art classrooms equipped with overhead projectors and modern furniture, fully equipped conference rooms with video-conferencing facility, a 24x7 library and a

computer lab with latest configuration machines as well as access to various software and databases.

## PATRON

**Prof. (Dr.) Neelu Rohmetra**  
Director, IIM Sirmaur

## FDP COORDINATORS

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## HOW TO REACH IIM SIRMAUR

**By Bus:** The nearest bus stand is located at Paonta Sahib. The campus is around 2.5 Kms from the bus stand.

**By Rail:** The nearest railway stations to IIM Sirmaur are Dehradun and Yamuna

nagar railway stations. IIM Sirmaur campus is around 45 and 60 Kms from Dehradun and Yamuna Nagar respectively.

**By Air:** The nearest airports to IIM Sirmaur are Jolly Grant Airport, Dehradun and Chandigarh Airport which are 78 and 110 Kms (approx..) away from IIM Sirmaur campus respectively.

## NERABY ATTRACTIONS

**Renuka Ji** lake is a holy place in Sirmaur district of Himachal Pradesh. This lake was named after the goddess Renuka. It is well connected by the road from IIM Sirmaur campus and is about 52 Kms. Boating is available on the lake.

**Dehradun** is the capital of Uttarakhand and is located at 45 Kms from IIM Sirmaur campus. This place has many tourist attractions such as FRI, Shashtradhara, Robbers' Cave etc.

**Mussoorie** is a hill station in Uttarakhand which is known for a number of tourist attractions. It is about 80 kilometres from IIM Sirmaur campus.

**Rishikesh** is a one of the major destination of yoga enthusiasts, adventure seekers and spirituality postulant. It is around 95 Kms from IIM Sirmaur campus.

**Haridwar** is considered as one of the seven holiest place to Hindus. It is around 110 Kms from IIM Sirmaur campus.

## SESSION SCHEDULE

Day	Session	Topic
21/06/2021	10:00 am - 11:00 am	Problem Identification, Research Designs & Hypothesis Development
	11:00 am - 12:00 pm	Inauguration
	12:00 pm - 1:00 pm	Problem Identification, Research Designs & Hypothesis Development (contd)
	1:45 pm - 3:45 pm	Questionnaire Design & Data Preparation
	4:00 pm - 6:00 pm	Basics of Probability & Statistics (Normal Distribution, t-distribution, F-distribution,

		hypothesis testing)
22/06/2021	10:30 am - 12:30 pm	Basics of Probability & Statistics (Hypothesis testing to compare between two populations)
	1:30 pm - 3:30 pm	ANOVA
	4:00 pm - 6:00 pm	Regression Analysis
23/06/2021	10:30 am - 12:30 pm	Regression Analysis (continued)
	1:30 pm - 3:30 pm	Logistic Regression
	4:00 pm - 6:00 pm	Discriminant Analysis
24/06/2021	10:30 am - 12:30 pm	Factor Analysis
	1:30 pm - 3:30 pm	Conjoint Analysis
	4:00 pm - 6:00 pm	Conjoint Analysis (continued)

25/06/2021	10:30 am - 12:30 pm	Multi-Dimensional Scaling
	1:30 pm - 3:30 pm	Session on stress management, human values ethics, health and happiness
	4:00 pm - 6:00 pm	Evaluation Feedback Valedictory