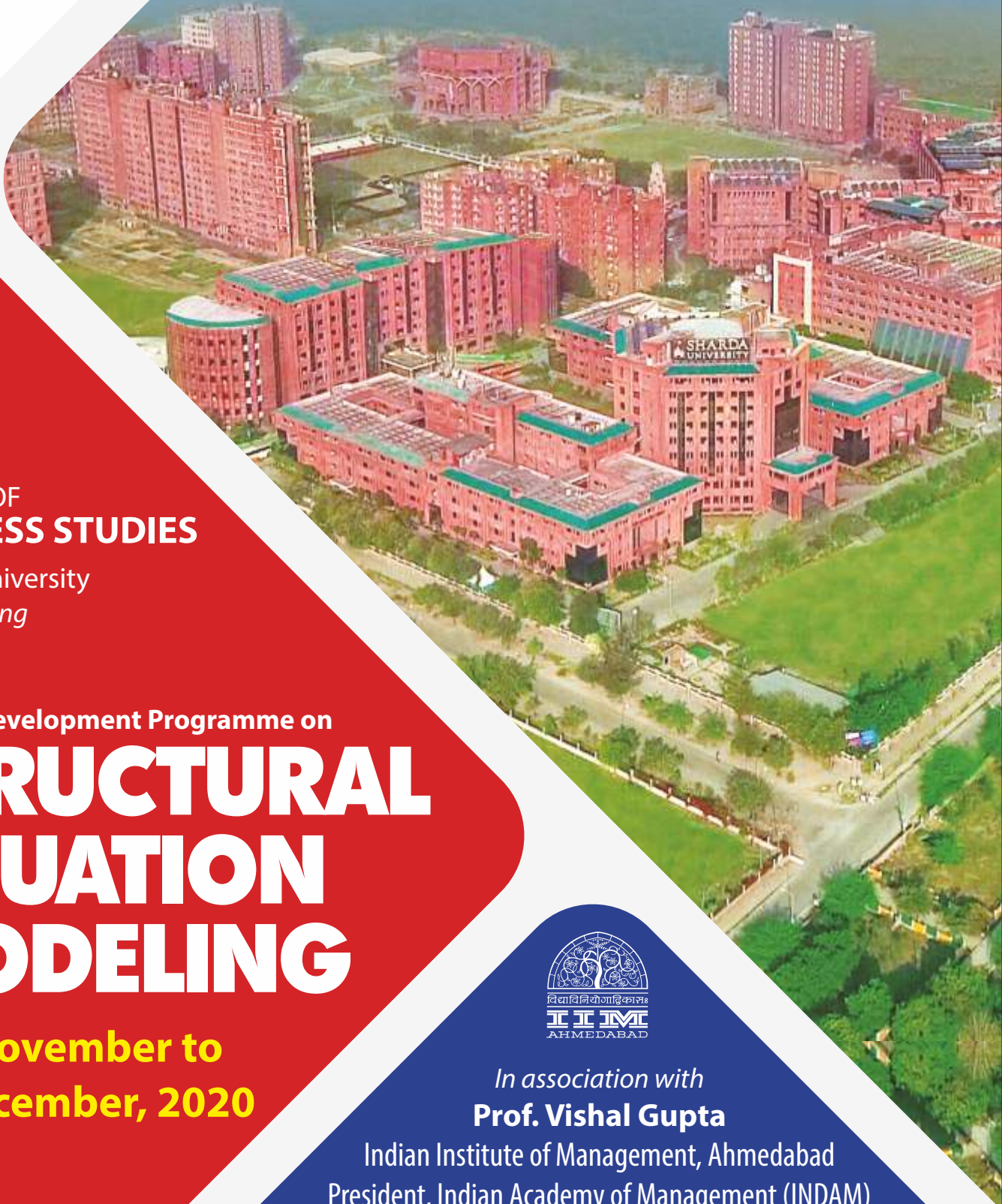




SHARDA
UNIVERSITY
Beyond Boundaries



SCHOOL OF
BUSINESS STUDIES

Sharda University
is conducting

Faculty Development Programme on

STRUCTURAL EQUATION MODELING

**28th November to
2nd December, 2020**



In association with
Prof. Vishal Gupta

Indian Institute of Management, Ahmedabad
President, Indian Academy of Management (INDAM)

THEME OF THE FACULTY DEVELOPMENT PROGRAMME (FDP)

Structural Equation Modeling (SEM) is a statistical methodology that is widely used in social sciences research (especially marketing, organizational behavior, human resource management, psychology, behavioral finance and behavioral economics). SEM was introduced in 1970s and combines psychometrics with econometrics. On the psychometric side, SEM allows for latent variables with multiple indicators. On the econometric side, SEM allows for multiple equations, possibly with feedback loops. SEM models are so general that they encompass most of the statistical methods that are currently used in the social and behavioral sciences. SEM allows a researcher to test complex models with multiple pathways, model latent variables with multiple indicators, investigate mediation and moderation in a systematic way and adjust for measurement error in predictor variables. This workshop shall provide the participants a general introduction to SEM. The workshop will be based on a combination of theoretical and practice-oriented sessions that will provide working knowledge of R, a statistical software.

LEARNING OBJECTIVES

Upon the completion of this FDP, the participants would be able to:

1. Understand analysis techniques like confirmatory factor analysis, path analysis and structural equation modeling (SEM).
2. Understand concepts like mediation and moderation testing used in the design and conduct of management research.
3. Get hands-on training on statistical analysis package R and R-studio.

WHO SHOULD ATTEND ?

This workshop is designed for researchers working in social sciences (OB, HRM, Marketing, Strategy, Communication, etc.) who want to apply SEM methods in their own research projects. No previous background in SEM is necessary. But participants should have a good working knowledge of basic principles of statistical inference (e.g., standard errors, hypothesis tests, confidence intervals), and should also have a good understanding of the basic theory and practice of linear regression.

The empirical examples and exercises in this course will emphasize use of R. Participants are encouraged to bring their own laptop loaded with R and RStudio. Both R and RStudio are open source software and can be downloaded from the following links:

R (for Windows): <https://cran.r-project.org/bin/windows/base/>

Rstudio: <https://www.rstudio.com/products/rstudio/download/>

ABOUT THE FACILITATOR

(Prof. Vishal Gupta, Associate Professor, IIM Ahmedabad)



Vishal Gupta is an Associate Professor in the Organizational Behaviour Area at the Indian Institute of Management Ahmedabad, India. He obtained his doctorate in Human Resource Management from the Indian Institute of Management Lucknow, India, in 2013. His PhD thesis on 'Leadership in Public Sector R&D Organizations' was awarded the 'Outstanding Doctoral Dissertation' award in the year 2013-14 in Leadership & Organizational Development category by European Federation for Management Development and the Emerald Group Publishing. He was recognized as an Emerging Psychologist by the National Academy of Psychology, India in 2014. In 2016, he was conferred the Young Scientist Award in Social Sciences Category by the National Academy of Sciences India and Scopus (Elsevier). He is the President of the [Indian Academy of Management](http://www.iima.ac.in/~vishal). His research has been published in international and national journals of repute and has been covered by dailies like The Times of India, Business Line, Ahmedabad Mirror, Mint and DNA. His webpage is: www.iima.ac.in/~vishal

ABOUT SHARDA UNIVERSITY

Sharda University is a leading Educational institution based out of Greater Noida, Delhi NCR. A venture of the renowned Sharda Group of Institutions (SGI), The University has established itself as a high quality education provider with prime focus on holistic learning and imbining competitive abilities in students. The University is approved by UGC and prides itself in being the only multi-discipline campus in the NCR, spread over 63 acres and equipped with world class facilities. Sharda University promises to become one of the India's leading universities with an acknowledged reputation for excellence in research and teaching. With its outstanding faculty, world class teaching standards, and innovative academic programmes, Sharda University intends to set a new benchmark in the Indian education system .

ABOUT SCHOOL OF BUSINESS STUDIES

School of Business Studies offers innovative and enriching educational exposure to the corporate world of work, services and businesses. Interaction with industry leaders from India and abroad develops local as well as global understanding of the changing needs of the emerging economies. The educational programmes at the School of Business Studies help students realize their potential to grow into promising youth with the ability to build India of the 21st century as the commercial hub of international interest and activity in Asia.

FDP SCHEDULE

| TIME | DAY 1: November 28, 2020 (Saturday) |
|-------------------|---|
| 09:30AM - 11:00AM | Session-1: Introduction to Measurement, Reliability, Validity, Exploratory Factor Analysis (EFA) |
| 11:00AM - 11:30AM | Break |
| 11:30AM - 01:00PM | Session-2: Reliability and EFA testing using R, R-Studio |
| 02:00PM - 03:30PM | Session-3: Introduction to Structural Equation Modeling |
| TIME | DAY 2: November 29, 2020 (Sunday) |
| 02:00PM - 03:30PM | Session-1: Identification, Degrees of Freedom and Goodness of Fit Measures |
| 03:30PM - 03:45PM | Break |
| 03:45PM - 05:15PM | Session-2: Measurement Models and Confirmatory Factor Analysis |
| TIME | DAY 3: November 30, 2020 (Monday) |
| 09:30AM - 11:00AM | Session-1: Path Analysis with Latent Variables, Testing Mediation and Indirect Effects (Sobel test and Bootstrap method) |
| 11:00AM - 11:30AM | Break |
| 11:30AM - 01:00PM | Session-2: Testing Mediation and Indirect Effects (Sobel test and Bootstrap method) |
| 01:00PM - 02:00PM | Break |
| 02:00PM - 03:30PM | Session-3: Moderation Testing |
| TIME | DAY 4: December 1, 2020 (Tuesday) |
| 09:30AM - 11:00AM | Session-1: Moderation Testing |
| 11:00AM - 11:30AM | Break |
| 11:30AM - 01:00PM | Session-2: Additional Issue in SEM (Item parceling, tackling common method bias, non-normality, modeling missing data) |
| TIME | DAY 5: December 2, 2020 (Wednesday) |
| 10:00AM - 11:00AM | Session-1: Additional Issue in SEM (Item parceling, tackling common method bias, non-normality, modeling missing data) |
| 11:00AM - 12:00AM | Wrap-up and conclusion |

REGISTRATION AND CERTIFICATION

FDP Fees: **INR 2000/-**participant (including GST)

In order to register for the workshop, please make the payment at:

Bank Name: **Axis Bank**
Account Holder Name: **Sharda University**
Account No.: **912010034708496**
Branch Code: **000624**
IFSC Code: **UTIB0000624**
MICR Code: **110211054**
SWIFT Code: **AXISINBB624**

OR
Paytm at :



Kindly register at the following link:

<https://forms.gle/zjg3tHfE2U76ofpt9>

- Registration will close on November 15, 2020 or when the seats of the FDP are filled (whichever is earlier).
- Please check the availability of seats by clicking on the registration link before making the payment as the FDP has limited seats (100 in number).
- The registration will be purely on first-come-first-serve basis.
- FDP will be held through the online video-conferencing platform Zoom.
- The link and password will be provided to the participants after they have registered for the FDP.
- Only registered participants will receive the link and the password on their registered e-mail addresses.

E-CERTIFICATES WILL BE PROVIDED TO ALL THE REGISTERED PARTICIPANTS AFTER THE SUCCESSFUL COMPLETION OF THE WORKSHOP.

PATRONS

Prof. Sibaram Khara (Vice Chancellor, Sharda University)
Prof. Deepankar Chakrabarti (Dean, School of Business Studies)

CONVENOR

Dr. Monica Agarwal (monica.agarwal@sharda.ac.in), 9212121902

CO-CONVENORS

Dr. Ankur Agrawal (ankur.aggrawal@sharda.ac.in), 9250663828
Dr. Santhi Narayanan (santhi.narayanan@sharda.ac.in), 9811597665
Dr. Nimmi Agarwal (nimmi.agarwal@sharda.ac.in), 9810777226
Prof. Swati Bansal (swati.bansal@sharda.ac.in), 8826735522

MODERATOR

Dr. Anoop Pant (anoop.pant@sharda.ac.in)
Dr. Manmohan Rahul (manmohan.rahul@sharda.ac.in), 9873002179

ORGANIZING COMMITTEE

Dr. Bithika Bishesh (bithika.bishesh@sharda.ac.in), 8800756375
Prof. Saumya Kumar (saumya.kumar@sharda.ac.in), 8512013344
Dr. Mohit Maurya (mohit.maurya@sharda.ac.in), 9650124614
Prof. Sandeep Anand (sandeep.anand@sharda.ac.in), 9555964370
Dr. Deepa Kumari (deepa.kumari@sharda.ac.in), 9811680604
Prof. Anup Srivastava (anupkumar.srivastava@sharda.ac.in), 9718339906

SHARDA UNIVERSITY CAMPUS

PLOT NO.32-34 KNOWLEDGE PARK -III GREATER NOIDA, UTTAR PRADESH 201310
Website : www.sharda.ac.in

