



विश्वजीवनामृतं ज्ञानम्

## Faculty Development Programme

*on*

# Structural Equation Modeling & Analysis (SEMA-2023)



(9<sup>th</sup> – 15<sup>th</sup> October 2023)

*Organized By*

Department of Management Studies  
ABV-Indian Institute of Information  
Technology & Management, Gwalior  
[www.iiitm.ac.in](http://www.iiitm.ac.in)

*Programme Coordinator*

Dr. Manoj Dash, Dr. Vishal Vyas, Dr. Arun Kumar  
ABV-IIITM, Gwalior

# About the Programme

The Department of Management Studies is going to organize Seven-day Faculty Development Programme (FDP) on Structural Equation Modeling and Analysis (SEMA-2023) from 9 to 15 October, 2023. It is an attempt to enrich the participants on Structural Equation Modeling (SEM) using SPSS, AMOS, and SMARTPLS software. SEM is a multivariate statistical analysis technique that is used to analyze structural relationships between measured and latent variables. The programme will discuss the various types SEM such as Confirmatory Factor Analysis, Path Analysis, and Partial Least Squares Modeling. Each of these helps to build relationship between variables. The programme will provide theoretical knowledge as well as hands on learning.

## Objectives

- To aid an understanding of identification and validation of factors based on data.
- To explain how to test and evaluate multivariate casual relationships.
- To aid an understanding of complex models consisting of multiple variables including mediators and moderators.

## Outcomes

- Provide an understanding of fundamental concepts of CFA and SEM and how such models can be applied to various discipline issues.
- Learn how to interpret, conduct, and report structural equation models.
- Ability to critical review any field research using SEM.

## Targeted Participants

Faculty members, Industry persons, Research Scholars and Students of any discipline with basic computer knowledge can attend the programme.

## FDP Venue

Atal-Bihari Vajpayee-Indian Institute of Information Technology and Management, Morena, Link Road, Gwalior, Madhya Pradesh - 474015

# About the Institute

Atal Bihari Vajpayee-Indian Institute of Information Technology and Management (ABV-IIITM) in Gwalior, Madhya Pradesh is an autonomous institute set by the Government of India, MHRD (Presently Ministry of Education, Govt. of India) in 1997. This institute was created for facilitating higher education, research, and consultancy in the areas of information technology (IT) and business management. Academics at our institute are focused on the advancement of knowledge and systematic understanding of course materials and their application areas. The institute aims to take academics to unprecedented levels of brilliance and efficiency.

## About the Department

The Department of Management Studies (DoMS), is an academic department of the ABV- IITM Gwalior. DoMS offers academic Programmes such as PhD, MBA and Integrated Programmes in Management with dual degrees of B.Tech, and M.B.A. The DoMS aims to develop holistic and responsible leaders by creating insightful knowledge and transforming human endeavors through technology-enabled management solutions.

## Registration Details

### Registration fees

**Rs. 2,000/- for Online Participants**

**Rs. 5,000/- for Offline Participants**

This includes breakfast, lunch, dinner and course materials. Accommodation will be provided on twin sharing basis. No TA/DA will be paid to participants.

### Mode of Payment

**Participants are required to transfer the fee amount in the following account through bank transfer/NEFT/UPI**

**Account no:** 945210110009380

**Account Name:** Director, ABV-IIITM, Gwalior

**Bank name:** Bank of India, Gwalior branch

**IFSC Code:** BKI D0009462

After Successful Payment Please click on the following link for  
Registration:

<https://forms.gle/LvkMHPLjjGdxHTjn6>

IF ANY QUERIES PLEASE CONTACT THE PROGRAMME COORDINATORS

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Dr. Arun Kumar (+91 9664205137)

**Faculty Development Programme**  
**Structural Equation Modeling and Analysis (SEMA-2023)**  
**Department of Management Studies, ABV-IIITM, Gwalior (9th- 15th October, 2023)**

	10.00-11.30	11.45-01.15	2.00-3.30	3.45-5.15
<b>Day1</b>	Inaugral Function	Connecting Threads to SEM: Basics of Statistics (Concept and Application Demonstration)	Connecting Threads to SEM: Basics of Statistics (Hands-on Exercises)	Data Preparations, Hypotheses Fix and Multivariate Connect (Concept and Application Demonstration)
<b>Day2</b>	Data Preparations, Hypotheses Fix and Multivariate Connect (Hands-on Exercises)	Deep Dive into Regression: Basic to Advance (Concept and Application Demonstration)	Deep Dive into Regression: Basic to Advance (Hands-on Exercises)	Dimension Reduction with Exploratory Factor Analysis (EFA)
<b>Day3</b>	Dimension Reduction with Exploratory Factor Analysis (Hands-on Exercises)	Dimension Reduction with Exploratory Factor Analysis (Hands-on Exercises)	Measurement Models: Confirmatory Factor Analysis (CFA)	Measurement Models: Confirmatory Factor Analysis (CFA) (Hands-on Exercises)
<b>Day4</b>	Measurement Models: Confirmatory Factor Analysis (CFA) (Hands-on Exercises)	Structural Models in SEM: Theoretical Foundations, Dependence Relationships and Acquaintances with AMOS	Structural Models in SEM with AMOS: Model Fit Assessment and Model Modification for Order Constructs	Structural Models in SEM with AMOS (Hands-on Exercises)
<b>Day5</b>	Testing Direct & Indirect Effects, Mediation & Moderation Analysis, Multigroup Analysis: Theoretical Foundations	Testing Direct & Indirect Effects, Mediation & Moderation Analysis, Multigroup Analysis: AMOS Applications	Testing Direct & Indirect Effects, Mediation & Moderation Analysis, Multigroup Analysis: AMOS Applications (Hands-on Exercises)	Testing Direct & Indirect Effects, Mediation & Moderation Analysis, Multigroup Analysis: AMOS Applications (Hands-on Exercises)
<b>Day6</b>	Structural Models in SEM: Acquaintances with PLS-SEM	Structural Models in SEM with PLS-SEM: Model Fit Assessment and Model Modification for Order Constructs	Structural Models in SEM with PLS-SEM (Hands-on Exercises)	Testing Direct & Indirect Effects, Mediation & Moderation Analysis, Multigroup Analysis: PLS-SEM Applications
<b>Day7</b>	Testing Direct & Indirect Effects, Mediation & Moderation Analysis, Multigroup Analysis: PLS-SEM Applications	Testing Direct & Indirect Effects, Mediation & Moderation Analysis, Multigroup Analysis: PLS-SEM Applications (Hands-on Exercises)	Testing Direct & Indirect Effects, Mediation & Moderation Analysis, Multigroup Analysis: PLS-SEM Applications (Hands-on Exercises)	Valedictory Function