

5 DAYS ONLINE
FACULTY DEVELOPMENT PROGRAMME
ON
Capacity Building Program
On
Research Methodology on Applied
Econometrics

(26 - 30 July 2021)

Organized by



National Institute of Industrial
Engineering, Mumbai
Vihar Lake, Mumbai- 400087, Maharashtra.

Sponsored by



Patron
Prof. Manoj Kumar Tiwari
Director, NITIE

Coordinator
Prof. Ajaya Kumar Panda
Prof. Rakesh Verma

About the Institute:

National Institute of Industrial engineering (NITIE) was established by the Government of India in 1963 with the assistance of United Nations Development Program (UNDP) through the International Labour Organization (ILO). NITIE has transformed itself from training the industrial workforce on industrial productivity to creating skilled industrial engineering professionals and managers who have the competencies to balance and bridge the growing engineering and management needs of the industry. NITIE's vision is to be the thought leader in Industrial Engineering education and research, and partner in the manufacturing renaissance of the nation. NITIE aims to reach its vision through a focused mission to advance transformative education and industry-inspired research in Industrial Engineering. Transformation is a continuous process. Through the three pillars of education, research and outreach activities, NITIE, as the premier and only Indian Institute focused on Industrial Engineering, is strategically positioned to propagate its next generation integrated Industrial Engineering and Manufacturing Model (IE/MM). This novel model lays emphasis on the identified interfaces between traditional Industrial Engineering and Manufacturing systems leading to enhanced industry effectiveness and efficiency. With a rigorous curriculum and contemporary program structure, the students of NITIE are primed to act as the transformation levers in the Indian industry. NITIE offers two major degrees – a research based Fellow and a Post Graduate Diploma. NITIE offers Post Graduate Diplomas in Industrial

Engineering, Industrial Management, Industrial Safety & Environmental Management, Manufacturing Management and Project Management.

About the Faculty:

The success of NITIE's education is largely anchored in its faculty as a key resource. A high caliber faculty ensures that the students receive maximum exposure to the latest insights and thinking from the industry. The members of faculty actively engage students with case-based curricula, real-world examples, and strong academic theories. With a passion for the classroom, they are also a dynamic, experienced and interactive group of knowledge leaders. Faculties at NITIE take utmost care that the education offered is translated into excellent career and job prospects for the students. For the same, faculties always work very closely with diverse industries, to fulfil the job aspirations of students. Members of the faculty are drawn from diverse disciplines in humanities, technology, and management. Many of them are highly distinguished professionals, trainers and leading authors in management. The combination of broad experience and devotion to scholarship translates into a faculty that is committed of staying ahead of industry trends, countering the business' most complex challenges and imparting their knowledge to tomorrow's business leaders.

About ATAL:

ATAL is committed for development of quality technical education in the country by initiating various schemes.

Objectives of the Course:

- Concept development of the researchers and faculty to define research problem and framework
- Help faculty and research scholar to formulate a research proposal
- Guide faculty and researchers in developing suitable research methodology and data analytical tools
- To provide a hands-on experience of the models and tools used for conducting research in the different subject domains
- To provide exposure to the participants to various Bi Variate and multi-variate methods in research and understand advanced issues of research. Train researchers to draw better conclusion from the analysis
- Guide researchers in writing a research paper
- To develop the flair for reading & critiquing research articles.

Course Duration:

14 sessions in 5 days including theories and practical. Each session is of 1:30 hours

Course Outcome:

- Conceptual clarity of the research process and methodology.
- Insights into different research designs and their implications
- Familiarity with tools and techniques of management decision making approach.
- Discussions and Interaction by Experts and experience sharing with co-

participants from different research areas across India.

The program focuses on maximizing hands on development of practical skills and data analytical tools.

Who Should Attend?

- Faculty members from universities/institutions.
- Research Scholars and PG Students from all the disciplines
- Participants from Government, Industry and staff of host institutions.

Resource Persons:

Prof. Ajaya Kumar Panda. (NITIE)
Prof. Rakesh Verma. (NITIE)
Prof. Nikhil Mehta. (NITIE)
Prof. Poonam Singh. (NITIE)
Prof. Binil Kumar A. (NITIE)
Prof. Deepak Kumar Behera. (NIT PATNA)

Registration:

- **Registration Fee- Nil**
- Program will be delivered through **online mode.**
- **The participants are advised to apply online at AICTE ATAL registration portal on or before 21st July 2021 through:**
<https://atalacademy.aicte-india.org/signup>
- No TA/DA will be provided.
- Number of participants is limited to 200 (first-come first-served basis).
- Scan copies of completely filled consent form must be sent to akpanda@nitie.ac.in on or before 21st July 2021.

Test and Certificate:

- A test shall be conducted by coordinator at the end of the program.
- The certificates shall be issued to those participants who have attended the program with minimum 80% attendance and scored minimum 60% marks in the test

5 DAYS ONLINE

FACULTY DEVELOPMENT PROGRAMME ON

**Capacity Building Program on
Research Methodology on Applied
Econometrics
(26 - 30 July 2021)**

[Consent Form](#)

1. Name: _____

2. Educational Qualification: _____

3. Designation: _____

4. Institution/Organization: _____

5. Correspondence Address: _____

6. E- mail: _____

7. Mobile: _____

Date and Signature

Recent
Passport
Size Photo

Note: The participants are advised to apply online at AICTE ATAL registration portal on or before 21st July 2021.

Organised by



**ATAL SPONSORED 5 DAYS ONLINE
FACULTY DEVELOPMENT PROGRAMME
ON**

CAPACITY BUILDING

Research Methodology on Applied Econometrics

(26 - 30 July 2021)

Sponsored by



**AICTE Training and Learning (ATAL)
Academy,**

**National Institute of Industrial Engineering,
NITIE, Mumbai, 400087**

PROGRAM SCHEDULE

Date	1st Session (10.00 AM – 11.30 AM)	2nd Session (11.45 AM – 01.15 PM)	3rd Session (2.30 PM – 4.00 PM)
26/07/2021 (Monday)	<i>INAUGURAL SESSION</i>	Data type, data sampling, data shorting, data screening	Descriptive Statistics, Statistical inference, Z test, t test, Paired t-test, F-Test. Chi square test
27/07/2021 (Tuesday)	ANOVA, Two Way ANOVA, Mann Whitney, Correlation, partial correlation test, non-parametric test	Predictive Modeling: Linear Regression, Bivariate and Multivariate modeling.	Heteroscedasticity, Auto correlation and Multicollinearity in timeseries data
28/07/2021 (Wednesday)	Testing time series properties: Stationarity, ACF, PACF, DF, ADF, PP	Time Series Modeling AR, MA, ARIMA	Identifying Best ARIMA, Diagnostic testing, forecasting with best ARMA.
29/07/2021 (Thursday)	Data Reduction: Factor, Cluster Analysis, Hierarchical and Non- Hierarchical segmentation,	Testing of Causality using Granger	Multivariate timeseries modeling, Vector Auto regression (VAR), Impulse response and Variance decomposition
30/07/2021 (Friday)	Cointegration and Vector Error correction model (VECM)	Life Skill Development: Developing Critical and Problem Solving Skill	FIT INDIA Movement: Health and Happiness

* A Test will be conducted at the end of the Program. **Valedictory Session** will be conducted from 4.00 PM on 30th July 2021.