



Indian Institute of  
Management Kozhikode  
Kochi Campus

*Globalizing Indian Thought*



# Advanced Certificate in Academic Research & Data Analysis

Batch: 2021-22

Faculty Development Programme

Online mode

Indian Institute of Management Kozhikode (IIMK) announces 100 Hour online Faculty Development Program (FDP) titled “Advanced Certificate in Academic Research and Data Analysis” January 2022 to July 2022. The course is designed to be a very interactive experience. The sessions will be handled by eminent academicians who have excellent research backgrounds and publication records in reputed international journals. The programme will equip the participants to understand the different phases of research and to come up with better research outcomes whether it be doctoral research or for publishing in reputed peer reviewed journals. The participants will be able to solve issues concerning the academic writing, research design, use of right data analysis tools, interpretation, and reporting of the results to meet the research/journal requirements. The contents of the FDP will be delivered into five modules, which provides an in-depth understanding about the various aspects of academic research, publishing in peer reviewed journals and data analysis.

**WHO SHOULD ATTEND:** This course is open for researchers, faculty members, research scholars and those who are interested in data analysis using software tools in the fields of management, economics, industrial, medical, and fundamental sciences. This course requires no prior training in probability and statistics.

**CERTIFICATION:** Those who are completing all five modules (100 Hours) will be provided with the course certificate. In the case of attending individual modules, the certificates will be issued considering the specific modules attended.

**PEDAGOGY:** The course will be skill-oriented and would emphasize hands-on data analysis using IBM SPSS & AMOS and/or R through the electronic platform. Thus, the participants should have good internet connectivity and a computer pre-installed with recent trial/original versions of the mentioned software. The sessions will be dealt through a participatory and highly interactive mode using necessary materials (e.g., data sets, book chapters, case studies, research articles, etc.)

## Advanced Certificate in Academic Research & Data Analysis

### MODULE 1 (20 Hour)

#### Strategies for Academic Publications

- Identifying the right research problem
- Positioning the research problem
- Conducting successful literature search
- Searching research papers (referencing and citation databases)
- Preparing systematic literature review papers
- Preparing empirical papers
- Identifying the right journal
- Targeting the right journal
- Journal classification and ranking
- Plagiarism and other related issues
- Research paper submission
- Addressing the reviewer comments
- Improving the scientific impact of journal papers

### MODULE 2 (20 Hour)

#### Research Design & Questionnaire Construction

- Introduction to research and selection of research design
- Hypothesis formulation
- Principles of measurement
- Item analysis, choice of scales and Questionnaire construction
- Validation of instruments
- Experimental design
- Common method bias

### MODULE 3: (20 Hours)

#### Data Analysis Using IBM SPSS

- Basic data screening and test of assumptions
- t-tests, ANOVA & ANCOVA, post hoc & contrast
- MANOVA & MANCOVA, post hoc & contrast
- Correlation and Regression analysis
- Mediation & moderation

### MODULE 4: (20 Hours)

#### Measurement Model Analysis

- Exploratory factor analysis
- Confirmatory factor analysis
- Test of validity and reliability
- Latent structure analysis (first order vs. second order models)
- Introduction to SEM

### MODULE 5: (20 Hours)

#### Structural Equation Modelling

- Latent variable modelling
- Model testing vs. validation
- Path analysis
- Latent variable mediation, and moderation analysis
- Mediation and moderation analysis in a path analytic framework
- Multi-group CFA & SEM
- Reporting results for journal papers/thesis.

**PROGRAM UNIQUENESS:** The 6 month continuous learning interaction with IIMK faculties provides better research orientation. The selected participants will get an opportunity to work with IIMK Professors in developing their research publications into top tier academic journals.

**PROGRAM DELIVERY:** The program will be in Device-to-Device (D2D) mode, which will be facilitated through the Zoom platform with adequate security features. The selected participants can attend the sessions by logging in from their computer. Maximum of 6 Hours class on a week week (6.45 P.M to 9.45 P.M)..

#### PROGRAM COORDINATOR/ RESOURCE PERSONS

##### Prof. Anandakuttan B. Unnithan

Dean (Faculty Administration & Development)  
Professor, Marketing Management Area  
IIM Kozhikode

##### Prof. Sreejesh S

Assistant Professor  
Marketing Management Area  
IIM Kozhikode

#### PROGRAM FEE: Payment Options

**Modular**<sup>1</sup> (payable at least 5 days before start of each module)

Module 1: Rs. 7,500 + (18% GST)  
Module 2: Rs. 7,500 + (18% GST)  
Module 3: Rs. 7,500 + (18% GST)  
Module 4: Rs. 7,500 + (18% GST)  
Module 5; Rs. 7,500 + (18% GST)

#### **Onetime payment**<sup>2</sup>

All five modules: Rs. 35,000 + (18% GST)

## Advanced Certificate in Academic Research & Data Analysis

### How to Apply\*<sup>3</sup>

Please find the link below to apply online and pay the fee <https://iimk.ac.in/advanced-certification-in-academic-research-data-analysis>

\*: The programme faculty may decide not to accept certain applications if found unsuitable for the programme.

### Programme Timelines\*\*:

Online Application starts: September 2021

Online Application Closes: January 1, 2022

Admission Confirmation: January 5, 2022

Module-1 Starts: January 10, 2022

Module-2 Starts: (to update)

Module-3 Starts: (to update)

Module-4 Starts: (to update)

Module-5 Starts: (to update)

\*\*Tentative



### Address for Communication & Campus location

[kochimdp@iimk.ac.in](mailto:kochimdp@iimk.ac.in)

IIMK Kochi Campus  
Indian Institute of Management Kozhikode  
First floor, Software Development Block  
Athulya IT Complex, Infopark, Kakkanad  
Kochi – 682 030

Location: <https://goo.gl/o8WDw6>

Website: <https://iimk.ac.in/kochi/about.php>

### Contact

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Business Development Officer  
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[bhupesh\\_k@iimk.ac.in](mailto:bhupesh_k@iimk.ac.in)

<sup>1</sup> Last date for payment for Module-1 shall be 1<sup>st</sup> January 2022

<sup>2</sup> Last date for payment shall be 1<sup>st</sup> January 2022.

<sup>3</sup> The system will prompt you to register with Name, email and mobile number and continue with the application form

