

Faculty and Staff Development Training Centre
Government Engineering College, Thrissur



Faculty Development Programme on
MULTIVARIATE DATA ANALYSIS

December 17 – 21, 2018



Organised by
Department of Economics
Government Engineering College
Thrissur 680 009



Sponsored by
Directorate of Technical Education
Government of Kerala

Course Coordinator:
Rajesh P.
Asst. Professor of Economics
Govt. Engg. College, Thrissur

■ Overview of the Programme

Multivariate data analysis is an integral part of research and decision making in almost all disciplines. Multivariate analysis refers to all statistical techniques that simultaneously analyse more than two variables. The abundance of multivariate statistical techniques and the availability of powerful statistical packages have made the multivariate data analyses accessible to most of the researchers and professionals. However, the scanty knowledge in the statistical techniques and lack of proper training in the software applications for the multivariate data analysis often results in improper use of the data and the invalid research outcomes.

This training programme is designed to make multivariate data analysis more comprehensible and less toxic to the participants. The programme intends to provide the participants a conceptual understanding of the important multivariate statistical techniques and its practical implementation in the research using the appropriate software packages. Upon successful completion of the training, the participants are expected to use the multivariate statistical analysis fearlessly in their research works and professional decision making. This training programme will be more useful for the faculty members, who are engaged in research, for developing their data analysis skills.

■ Course Content

The training programme expects to provide conceptual clarity and hands-on practical training on the following topics:

- Introduction to Inferential Statistics
- t-tests - One Sample t-test, Independent Samples t-test, Paired Samples t-test
- ANOVA, ANCOVA, MANOVA, MANCOVA, and Repeated Measures ANOVA
- Non-parametric Tests
- Multiple Regression: Estimation, Interpretation, Regression Diagnostics
- Logistic Regression Analysis
- Discriminant Analysis
- Time Series Analysis
- Panel data analysis
- Exploratory and Confirmatory Factor analysis
- Structural Equation Modelling.

■ Pedagogy

The course delivery will be a mix of interactive lectures, demonstrations, and hands-on practical training using appropriate statistical software packages.

■ **Resource Persons:**

The course content will be delivered by reputed and experienced experts in the subject from nationally reputed research institutes, universities and colleges.

■ **Who Can Participate?**

This programme is designed for the faculty members working in the AICTE approved government/aided/self-financing engineering colleges and Polytechnic colleges in Kerala. Since it is an interdisciplinary programme, faculty members from all engineering/non-engineering disciplines are eligible to participate in it. No prior knowledge on advanced statistical methods is required for participating in the programme.

■ **How to Apply?**

The application for admission to the FDP should be submitted **online** to the ***DTE Kerala Training Portal*** through the link:

<http://admissions.dtekerala.gov.in/tpms/homeOA>

The candidates are also required to send the duly filled Registration Form to the coordinator as early as possible. The number of participants is **limited to a maximum of 20**. Registrations will be done on 'first come first served' basis.

■ **Registration Fee**

No registration fee will be charged from the participants.

■ **Travelling Allowance & Accommodation**

Outstation candidates from government and government aided colleges are eligible for travelling allowances, and the TA will be provided as per the FSDTC norms, subject to the availability of fund.

Accommodation will be arranged for the participants, if needed. The participants who need accommodation may inform the same to the coordinator in advance.

■ **Important Dates:**

Last date for the online registration : **13th December, 2018.**

Programme dates : **17th - 21th December, 2018**

■ **About Government Engineering College, Thrissur**

The Government Engineering College, Thrissur, established in 1957, is one of the premier institutes of technological education in Kerala. Affiliated to the APJ Abdul Kalam Technological University, the college offers seven undergraduate programmes, six part-time undergraduate programmes, ten post graduate programmes and doctoral programme in engineering. Besides the engineering programmes, the college also offers undergraduate and post graduate programmes in Architecture and Post-graduate programme in Computer Applications (MCA). The college, which is an ISO 9001: 2000 certified institution, is recognized by the AICTE and

programmes are accredited by the NBA. The college campus is spread over an area of 75 acres and is located at Ramavarmapuram, which is about 5 km from the heart of Thrissur Town and about 6 km from Thrissur Railway Station.

■ **About the Department of Economics**

The economics department at GEC, Thrissur offers a course in economics (Business Economics) to the students belonging to all the branches of engineering. The course aims to provide them with the economic and financial decision making tools suitable for efficient and optimum decision making in their engineering profession. The department has successfully organised six short-term training programmes for the faculty members and researchers during the last four years.

■ **The Faculty and Staff Development Training Centre**

The Faculty and Staff Development Training Centre (FSDTC) at Government Engineering College, Thrissur provides a suitable platform for personal, academic and professional development of faculty members and supporting staff of various engineering colleges and Polytechnic colleges in Kerala. The centre strives to improve the quality of the teaching-learning process and research in technological education in Kerala by instilling proper and up-to-date methodologies in the system. FSDTC of our college organises a series of training programmes on various relevant topics for the faculty members and the supporting staff of engineering colleges and polytechnic colleges in the state.

Address for Communication

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■ **Note:** Participants are requested to bring their own laptop for the practical sessions in the data analysis.

■ **Enquiry :** For further clarification or information please feel free to contact the coordinator.



For Registration follow the link or scan the QR Code

<http://admissions.dtekerala.gov.in/tpms/homeOA>

FACULTY AND STAFF DEVELOPMENT TRAINING CENTRE
Government Engineering College, Thrissur
Faculty Development Programme on
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December 17 – 21, 2018

REGISTRATION FORM

(Please Use Capital Letters)

1. Name
2. Age 3. Gender : M F T
4. Designation.....
5. Department.....
6. Organization.....
7. Recognised under AICTE : Yes No
8. Address for Correspondence.....
.....
.....
.....
9. Mobile No.....
10. Email
11. Highest Educational Qualification.....
12. Years of Professional Experience.....

Declaration by the Applicant

The above mentioned information is true to the best of my knowledge and belief. I agree to abide by the rules and regulations governing the course.

Place:

Date:

Signature of the Applicant

Recommendation by the Head of the Institution

Mr./Ms./Mrs./Dr.....
is an employee of this institution. He/she will be permitted to attend the training programme, if selected.

Place:

Date:

Signature of the Principal /
Head of the Institution

Office seal

Photocopies can be used