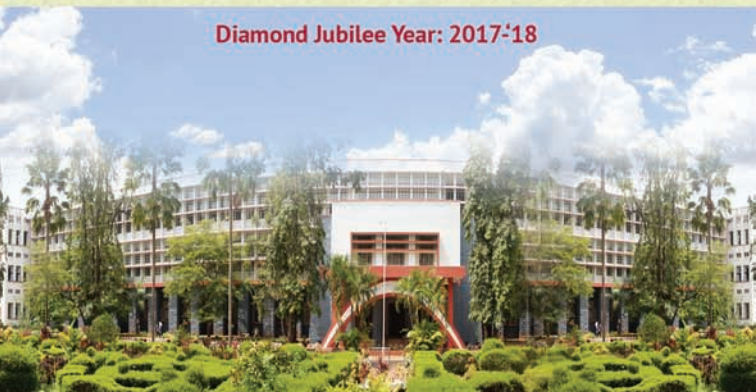


**Faculty and Staff Development Training Centre  
Government Engineering College, Thrissur**

**Diamond Jubilee Year: 2017-'18**



**Faculty Development Programme on  
MULTIVARIATE DATA ANALYSIS**

**February 19 – 23, 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

These days, researchers are bombarded by data from multiple sources. Knowledge of statistics helps them separate sense from nonsense in this flood of data. 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. Because of the difficulty of addressing complicated research questions and data sets with univariate analyses and because of the availability of powerful statistical software for performing multivariate analyses, multivariate statistics have become widely used.

This training programme is designed to make multivariate data analysis more comprehensible and less toxic. The programme intends to provide the participants a conceptual understanding of some 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 develop their capability in the selection of the appropriate multivariate statistical techniques, its computation using software, and the proper interpretation of the results, particularly 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:

- Overview of Multivariate Statistical Methods and Exploratory Data Analysis
- Hypothesis testing: t-tests, ANOVA and Non-Parametric Tests.
- Multiple Regression Analysis: Specification, Estimation and Model Adequacy Tests
- Time Series Analysis
- Panel Data Analysis.
- Discriminant Analysis and Logistic Regression
- Exploratory Factor Analysis
- 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 interested faculty members from the AICTE approved engineering colleges and polytechnique colleges in Kerala are required to send the dully filled registration form to the coordinator as early as possible. The filled-in registration form should reach the course coordinator latest by 14<sup>th</sup> February, 2018. A scanned copy of the registration form may be e-mailed to the coordinator as an advance copy.

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 receiving the filled-in registration form: **14<sup>th</sup> February, 2018.**  
Programme dates : **19<sup>th</sup> - 23<sup>th</sup> February, 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 Ramavarnapuram, which is about 5 km from the heart of Thrissur Town and about 6 km from Thrissur Railway Station. The college is celebrating its diamond jubilee this year.

### ■ **About the Department of Economics**

The economics department at GEC, Thrissur offers courses in economics (Engineering Economics and Business Economics) to the students belonging to all the branches of engineering. The courses aim 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 five short-term training programmes for the faculty members and researchers during the last three 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**

**Rajesh P.**

Assistant Professor, Department of Economics  
Govt. Engineering College, Thrissur – 680 009, KERALA.

Phone: 09447344410

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### ■ **Note:**

- Participants are requested to bring their own laptops for the practical sessions in data analysis.

### ■ **Enquiry**

For any further clarification or detailed information please contact the coordinator.

FACULTY AND STAFF DEVELOPMENT TRAINING CENTRE  
Government Engineering College, Thrissur  
Faculty Development Programme on  
MULTIVARIATE DATA ANALYSIS  
February 19 – 23, 2018

**REGISTRATION FORM**

(Please use Capital Letters)

1. Name .....
2. Age ..... 3. Gender :  Male  Female
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