

Govt. College of Engineering Kannur

DTE Sponsored STTP on Data Analytics and Machine Learning using R and Python

05 - 10 March 2018

REGISTRATION FORM

Name :
Designation :
Department :
Organisation :
Qualification :
Mailing Address :
Phone :
Mobile :
E-mail :
Place :
Date: Signature of Applicant

SPONSORSHIP CERTIFICATE

Certified that Dr./Mr./Ms.

.....
is hereby sponsored to attend attend DTE
Sponsored STTP on Data Analytics and
Machine Learning using R and Python.

He/She will be permitted to attend the
programme for the entire duration, if selected.

Place:
Date: Signature of Head
(Office Seal) of the Institution

HOW TO APPLY

Duly filled registration form, endorsed by the head of the Institution, should be send to the programme coordinator on or before 28th February 2018. (Scanned copy of registration form may be sent in advance to bindupv@gcek.ac.in or sajith.b@gcek.ac.in)

For online registration, use the link
www.gcek.ac.in/data

CONTACT DETAILS

BINDU P. V. / SAJITH B.

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bindupv@gcek.ac.in

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Online Registration:

www.gcek.ac.in/data

IMPORTANT DATES

Last date of receiving application
28th February 2018

Intimation about selection
01st March 2018

Programme on
05-10 March 2018



GOVERNMENT COLLEGE OF ENGINEERING KANNUR
Mangattuparamba, Parassinikkadavu - P.O., Kannur

DTE
Sponsored

Short Term
Training
Program on

**Data Analytics and Machine
Learning using R and Python**

05 - 10 March 2018

Sponsored by



DTE KERALA
Directorate of Technical Education, Govt. of Kerala

Organised by

**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
GOVERNMENT COLLEGE OF ENGINEERING KANNUR**

Coordinators
Bindu P V, Sajith B

DEPARTMENT VISION

To be a centre of excellence in the field of Computer Science and Engineering education and research, which extends its appreciated services to the industry and the society.

DEPARTMENT MISSION

To develop engineers with excellent analytic, design and implementation skills, who can expertise themselves as computer professionals, research engineers, entrepreneurs or as managers, while fulfilling their ethical and social responsibilities, in a globally competitive environment.

About the Institute

Government College of Engineering Kannur (GCEK) is one among the prestigious technological institutions under the Technical Education Department of Government of Kerala, and is located at Mangattuparamba, Kannur. The college is affiliated to Kerala Technological University. It offers five B. Tech Degree programs in Civil, Mechanical, Electrical and Electronics, Electronics and Communication and Computer Science and Engineering branches. The College also offers four M.Tech programs in Civil Engineering (Computer Aided Structural Engineering), Mechanical Engineering (Advanced Manufacturing and Mechanical Systems Design), Electrical and Electronics Engineering (Power Electronics and Drives), and Electronics and Communication Engineering (Signal Processing and Embedded Systems).

There are three research centres offering Ph.D programs in Civil, Mechanical and Electrical Engineering under Kannur University. Doctoral programs are also offered under Kerala Technological University. The institution is recognized by Kerala Technological University as a 'Centre of Excellence in Systems, Energy and Environment'. Research works are also carried out in technical collaboration with Delft University, The Netherlands. The institution has about 50 % Ph.D qualified faculty leading the teaching and research.

About the Course

Data analytics is the process of examining data sets in order to draw conclusions about the information they contain, with the aid of specialized systems and software. Data analytics technologies and techniques are widely used in commercial industries to enable organizations to make more informed business decisions and by scientists and researchers to verify or disprove scientific models, theories and hypotheses. Data analytics primarily refers to a range of applications,

from basic business intelligence, reporting and online analytical processing to various forms of advanced analytics. Machine learning is a method of data analysis that automates analytical model building. It is a branch of artificial intelligence that investigates how computers can learn from data to recognize complex patterns and make intelligent decisions with minimal human intervention. Machine learning is a fast-growing discipline and in recent years, it has gained a lot of importance and wide acceptance. This course is intended to introduce the algorithmic approaches in data analytics and machine learning, and to discuss the recent research directions in these areas.

Objectives of the Programme

This course will help the participants to develop a basic understanding of the principles of data analytics and machine learning and derive practical solutions using predictive analytics. The main objective of the short term training programme is to cover the recent trends and advancement of data analytics and machine learning concepts and tools, and practice the same using R and Python programming.

Course Outcomes

After successful completion of the course, the participants shall be able to:

- ☞ Understand how machine learning concepts are related to statistics and data analytics
- ☞ Understand how machine learning uses computer algorithms to search for patterns in data
- ☞ Learn how to use data patterns to make decisions and predictions with real-world examples
- ☞ Identify the recent advancements in data analytics and machine learning
- ☞ Apply data analytics and machine learning tools and concepts for research and development

Course Contents

The major topics covered under the programme are:

- ⇒ Introduction to data analytics
- ⇒ Introduction to machine learning
- ⇒ Classification algorithms
- ⇒ Regression analysis
- ⇒ Clustering algorithms
- ⇒ Basics of Python
- ⇒ Data analytics using Python
- ⇒ Machine learning in Python
- ⇒ Basics of R
- ⇒ Data analytics using R
- ⇒ Machine learning in R
- ⇒ Data visualization in R

Target Audience

The faculty members and System Analyst/Computer Programmer from Government, aided and self financing Engineering Colleges and Polytechnic Colleges can apply for this course. However, the total number of participants is limited to 30 and the registration is on a first come first served basis.

Resource Persons

Experts from academia and industry who have several years of experience in the area will handle the theory and hands-on sessions.

Course Delivery Mode

Participants will be immersed in interactive sessions with hands-on labs after each topic.

Course Fee

Participants from private self financing colleges need to pay a Course fee of Rs. 5000/-

TA/DA, Food and Accommodation

Working lunch, tea and snacks will be provided for all participants during the days of the workshop. TA will be provided as per Govt. norms to faculty and staff from Govt. / Govt. Aided institutions.

Accommodation assistance can be done on prior request.