### **CHIEF PATRON**

Kavi Kireeti Dr. V MALAKONDA REDDY President, CBIT

### PROGRAM MONITORING COMMITTEE (PMC)

Prof. G. P. SARADHI VARMA (Chairman) Principal, CBIT

Prof. P. RAVINDER REDDY (Subject Expert) Dept. of Mechanical Engineering

Prof. P.V.R. RAVINDRA REDDY (Member) Head, Dept. of Mechanical Engineering

Prof. D. KRISHNA REDDY (Member) Head, Dept. of ECE

#### Dr. Md. ALEEM PASHA (Coordinator-FDP & Member Secretary-PMC) Assoc. Prof., Department of Mechanical Engg.

### **CO-COORDINATORS**

### Mr. T. N. ADITYA

Asst Professor, Dept. of Mechanical Engineering Email: tnaditya\_mech@cbit.ac.in. ①+91-7569798811.

### Dr. MANOWAR HUSSAIN

Asst Professor, Dept. of Mechanical Engineering Email: manowar\_mech@cbit.ac.in. ①+91-8271823853.

Registration Fee	Free
IMPORTANT DATES (Phase - I)	
Last date for Registration	: 12-11-2020
Intimation of selection	: 14-11-2020

### **IMPORTANT DATES (Phase - II)**

Last date for Registration	: 10-12-2020
Intimation of selection	: 12-12-2020

### HOW TO APPLY

The applicants should fill the Registration Form through Google Forms using below link

A test will be conducted at the end of the program and joint certificates shall be issued (by AICTE & conducting institute) to those participants who have attended the program and have scored minimum 60% marks in the test.

### **REGISTRATION LINKS**

Phase - I

https://forms.gle/vYgOmCTs3VSEBvL29

Phase - II

https://forms.gle/YYDh8V293kRHUXNk6







AICTE – Sponsored TWO-WEEK ONLINE FACULTY DEVELOPMENT PROGRAM (FDP)

on

# RESEARCH METHODOLOGIES AND STATISTICAL DATA ANALYSIS

Phase – I: 16<sup>th</sup> – 28<sup>th</sup> November, 2020 Phase – II: 14<sup>th</sup> – 26<sup>th</sup> December, 2020

# Organized by

### DEPARTMENT OF MECHANICAL ENGINEERING



# CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY(Autonomous)

CBIT, established in the Year 1979, has developed in Four Decades of its journey, as one of the Premier Engineering Institute in INDIA, in Telangana State. The Institute offers Eleven UG and Eleven PG Programs into which Brilliant and Meritorious Candidates with good EAMCET Rank are seeking admissions at CBIT. CBIT Students are prepared and perfected holistically to secure Placements in reputed National and Multi-National Industries. Alumni, nearly 25,000 Graduate Engineers, are successfully placed in their Careers and as Entrepreneurs Globally. The Institute has been granted Autonomous Status from the Academic Year 2013-14 onwards.



### ABOUT THE DEPARTMENT

The Department of Mechanical engineering, CBIT is offering 2 under graduate courses; Mechanical Engineering and Production Engineering with an intake of 120 and 60 respectively and Two PG programs in CAD/CAM

Thermal Engineering domains. and The department has 46 faculty members out of which 16 are PhDs. The department is growing exponentially in terms of R&D and consultancy. In the last 3 years 7 R&D sponsored projects of worth Rs. 98 lakhs were awarded to the department, 4 patents were published and 2 patents were filed, 22 works shops and 2 FDPs were organized, under the guidance of department faculty 15 PhDs were awarded and two were submitted. The Department is well equipped with all state-of-the-art equipment's, Laboratories & workshops providing all necessary facilities to the students. The Hexagon Capability Center India has opened Innovation laboratory in the premises of the CBIT. The lab has been equipped with hardware and a software worth Rs.6.50 Crore, B.E. Mechanical Engineering Production Engineering M.E CAD/CAM Programmes and were accredited by NBA

### **ABOUT THE FDP**

The objective of this programme is to emphasize on broad range of techniques available in both research process and data analysis for academicians, practitioners and researchers from interdisciplinary Domains. This FDP will provide an opportunity to the participants to share their experience and knowledge.

### **COURSE CONTENT**

- o Introduction to research Methodology
- Successful Literature search and Review
- o Problem Identification and Literature review

- o Research Philosophy and design
- o Publication Ethics
- $\circ$   $\;$  Writing Research Papers using Latex  $\;$
- Scientific Journal Finder
- Indexing and Impact factors
- o EffectiveReport Writing
- o Referencing Tools
- o Patent, copyright and Plagiarism.
- Creating research profile and Collaborations
- $\circ$   $\,$  Sampling and data collection
- Data Analysis
- Hypothesis formulation
- o Design of Experiments
- Different Optimization techniques
- Optimization using Genetic Algorithm
- Various univariate data analysis (T-test and ANOVA, etc)
- Various multivariate data analysis (Correlation, regression, multi regression and logistic regression, etc)
- Problem Validation
- o MAT Lab
- o Basics of SPSS and Data handling
- o Minitab software
- Case Studies
- o Data Analytics using Python

# **RESOURCE PERSONS**

Faculty from IIT'S, NIT'S, Universities, CBIT and other reputed institutions. Scientists and industry experts from reputed Organizations/ Industries.

### TARGET GROUP

Faculty members of the AICTE approved institutions, Research Scholars and Industry persons can register. Selected participants will be informed through mail. Selection is based on first-come-first-serve basis.