

Government College of Engineering, Karad  
(An autonomous Institute of Government of Maharashtra)

One Week FDP

On

Bioinspired Algorithms in Engineering  
Optimization

16<sup>th</sup> December to 20<sup>th</sup> December, 2019

Sponsored by TEQIP Phase III

### REGISTRATION FORM

Name: \_\_\_\_\_

Designation: \_\_\_\_\_

Institute/Organization: \_\_\_\_\_

Address for communication: \_\_\_\_\_

Mobile/Tel: \_\_\_\_\_

E-mail: \_\_\_\_\_

Educational Qualification: \_\_\_\_\_

Experience: \_\_\_\_\_

Registration Fee: Rs. \_\_\_\_\_

Payment DU No.: \_\_\_\_\_

Signature of Applicant

Signature of Head of the Institute (with seal and date)

### Patrons

Dr. A.E. Wagh

Director, Technical Education, M.S.

Prof. (Dr.) P. M. Khodke

CPA, NPIU, TEQIP-III, New Delhi

Prof. D. R. Nandanwar

J. D., Regional Office, Pune

Prof. Dr. S. P. Yavalkar

Co-ordinator, SPIU, TEQIP-III, Mumbai, M.S.

Prof. (Dr.) A. T. Pise

Principal, Govt. College of Engineering, Karad

Prof. (Dr.) S. P. Pande

Director, Rajkiya Engineering College, Azamgarh

### Conveners

Prof. Dr. Sanjeev Wagh

Head & Professor. (IT, Dept.), GCEK

Prof. B.S.Patil

Head & Asst. Prof., GCEK

Prof. Tauseef Ahmad

Head, IT, REC, Azamgarh

### Coordinator

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### Organizing Committee

Prof. L.L.Kumarwad

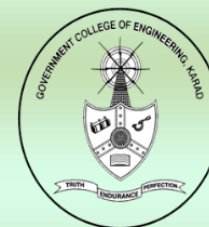
Mrs. S.V. Patil

Smt. P.P. Shinde

Mr. S.M. Kagadi

Government College of Engineering,  
Karad

(An Autonomous Institute of Govt. of Maharashtra)



Faculty Development Programme(FDP)

On

Bioinspired Algorithms in Engineering  
Optimization

Sponsored by

Technical Education Quality Improvement Programme  
(TEQIP Phase III)

16<sup>th</sup> December to 20<sup>th</sup> December, 2019

Organized by

Department of Information Technology  
Government College of Engineering,

With

Department of MCA

Karad – 415124 (M.S.) INDIA &

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Rajkiya Engineering College

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## ABOUT INSTITUTE

Govt. College of Engineering Karad is a premier institute in Western Maharashtra established in 1960 due to the efforts of Late Shri. Yashawantrao Chavan. The College is affiliated to Shivaji University, Kolhapur and is acting as a vital education center for many years. Recently the institute also got autonomous status. The institute offers 5 UG programs in Civil, Mechanical, Electrical, Information Technology and Electronics & Telecommunication Engineering and also 6 PG programs in Civil (Construction Management & Structural Engg.), Mechanical (Heat Engg. & Production Engg.), Electrical Engineering (Power Systems) and Master of Computer Applications (MCA).

Amongst the eleven institutes from Maharashtra state selected for participation in the third phase of Technical Education Quality Improvement Program (TEQIP-III) – an ambitious project of Government of India. Govt. College of Engineering, Karad is one of them. The institute is spread over 40 acres of serene and green campus and is a predominantly a residential campus. Karad city is situated on the confluence of rivers Krishna and Koyna and is well connected

## ABOUT FDP

As part of TEQIP-III, a Faculty Development Programme (FDP) on “Bioinspired Algorithms in Engineering Optimization” is being conducted at GCEK, Maharashtra to the faculty members of Engineering, Research Scholars and other allied disciplines from India. This FDP is devoted to fundamental theory, recent developments and research outcomes addressing the related theoretical and practical aspects of Bioinspired Algorithms, Machine Learning techniques for engineering applications in wide area. The FDP also aims hands-on using MATLAB for techniques to be used for implementing applications that require bio-inspired algorithms.

## Course objectives

>To learn and understand different bio-inspired algorithms used for the various engineering applications.

>To enhance the knowledge and technical skills of the participant through the workshop.

>To provide the knowledge of latest research innovations to the participants so that future generations get maximum benefit.

## PROGRAMME OUTCOME

The participant should be able to understand and apply different bioinspired algorithms and machine learning algorithms to the various engineering applications and to develop the research skills.

## COURSE INSTRUCTOR

Faculties from reputed institutes like IITs/NITs, Universities and Industries.

## ELIGIBILITY

Faculty members and research scholars from AICTE approved Engineering and polytechnic Institutes and Industrial persons are eligible to participate. Participants are required to register in advance using the enclosed form.

## COURSE CONTENTS

- ✓ Optimization Basics and Exploration in Bioinspired Algorithms
- ✓ Particle swarm Optimization (PSO)
- ✓ Genetic Algorithms
- ✓ Bat Optimization
- ✓ Artificial Bee Colony
- ✓ Teacher Learning based Optimization Algorithm (TLBO)
- ✓ Applications in wireless sensor networks/image processing/BCI/data science
- ✓ Hybridization Mechanism
- ✓ Convolutional Neural Networks

- ✓ Artificial Neural Networks
- ✓ Introduction to machine learning
- ✓ Journal Selection/Preparation/Submission (Scopus/SCI indexed)
- ✓ How to write a research proposal/thesis.

## REGISTRATION

The Participants who will receive confirmation mail will have to send the filled and duly signed registration form along with the copy of registration fees payment proof by email

## REGISTRATION FEES

**Student Participant: Rs. 1000/- each**

**Faculty Participant: Rs. 2000/- each**

**Industry Participant: Rs. 4000/-each**

The registration fees shall be paid on-line after receipt of acceptance from us. Traveling, Lodging, boarding and other expenses will have to be borne by the participant. Accommodation will have to be managed by the participants only. However, the guidance will be provided for accommodation.

**The link for online payment is:**

<https://www.onlinesbi.com/sbicollect/icollecthome.htm>

**Note: For any queries regarding payment, please contact the coordinators.**

**1. Registration fee is inclusive of breakfast, high tea, working lunch and program kit**

**2. Accommodation on first come first serve basis**

## DATE AND VENUE

**The FDP will be held 16<sup>th</sup> Dec to 20<sup>th</sup> Dec, 2019 at P.G.Hall, Govt. College of Engg., Karad**

- **Last Date of Registration: 10<sup>th</sup> Dec 2019.**
- **Notification of acceptance by e-mail: 12<sup>th</sup> Dec 2019.**

- Scanned copy of Completed Registration form should be send by email to course Co-coordinator.