

Government College of Engineering, Karad

One Week Online FDP on Applications  
of FEA and CFD-2020 using ANSYS

13 June - 17 June, 2020

Sponsored by TEQIP Phase III



GCE Karad Campus

CFD STIP 2015-16



CFD STIP 2017-18



CFD STIP 2018-19

Next is schedule in June 2020

### Patrons

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TEQIP III, Co-ordinator  
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Govt. College of Engineering, Karad

### Organising Committee

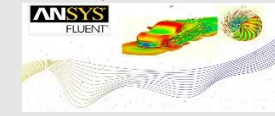
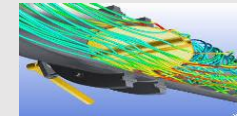
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ONE WEEK ONLINE FACULTY  
DEVELOPMENT PROGRAMME

On

Applications of Finite Element Analysis  
(FEA) and Computational Fluid  
Dynamics (CFD) using ANSYS

13 June – 17 June, 2020



Sponsored by  
Technical Education Quality Improved  
Programme  
(TEQIP Phase III)



Jointly organised by  
Mechanical Engineering Department  
(Accredited by NBA)  
Govt. College of Engineering, Karad  
<http://www.gcekarad.ac.in/>

&

Mechanical Engineering Department  
Rajikiya, Engineering College, Azamgarh  
<http://gecazamgarh.ac.in/>

## ABOUT FDP PROGRAMME

The objective of the FDP is to introduce fundamentals & applications of finite element analysis and CFD using ANSYS for solving numerous engineering and research problems of real world. Learning CFD is like a tool to engineer, scientists, and research scholars. Which acts like a third approach to solve an engineering and research problems apart from analytical and experimental approach.

## DATE AND VENUE

The TEQIP- Faculty Development Programme will be held during **13 June - 17 June, 2020** in online mode using **Cisco-Webex or Zoom app/web application.**

## COURSE CONTENTS

- Overview of FEA
- Discretization Techniques (FDM & FVM)
- Overview of CFD
- Applications of FEA in Civil Engineering using ANSYS
- Application of FEA in Automobile Engineering using ANSYS
- Structural Analysis using ANSYS workbench
- Modal Analysis
- Heat Exchanger Simulation
- Introduction to ANSYS Fluent
- Velocity measurement in fluid flow
- Modelling and simulation of cyclone

Experts from different specializations will be delivering lectures in various sessions. Each session would be followed by interactive sessions on the subject matter.

## ELIGIBILITY

Faculty members from AICTE approved institutions, Research Scholars and Industry delegates are eligible to attend the TEQIP-Faculty Development Programme.

## REGISTRATION

The online registration forms should be submitted **latest by 12<sup>th</sup> June, 2020.**

The [application form link for FDP](https://docs.google.com/forms/d/e/1FAIpQLSfihgNkTmOMF6bXUnUOhcHr0pT0FYm-j7-mpSxws0UzcNSeEA/viewform) is:  
<https://docs.google.com/forms/d/e/1FAIpQLSfihgNkTmOMF6bXUnUOhcHr0pT0FYm-j7-mpSxws0UzcNSeEA/viewform>

**No registration fee for online FDP. E-certificate will be provide after completion.**

*Participants are encouraged to have ANSYS Workbench installed to their laptop/desktop.*

## Course Instructor

Well- known experts from reputed engineering institutes and industries will conduct sessions of the training programme.

**Prof. Dr. Atul Sharma, IIT Mumbai**

**Prof. Dr. K. Murlidhar, IIT Kanpur**

**Prof. Dr. K. M. Singh, IIT Roorkee**

**Prof. Dr. Rajesh Bhaskaran, Cornell University, USA**

**Mr. Jitendra Jagtap, Optimizt Technologies, Pune**

**Mr. Navin Kumar, Optimizt Technologies, Pune**

**Mr. Rahul Salunkhe, Intel Technology, Bangalore**

**Mr. Sushil Kumar Jogdankar, MAN Trucks & Bus,**

**India Pvt. Ltd. Pune**

## LECTURE NOTES

To fully realize the objectives of the course, the lecture notes will be made available after completion of FDP.

## ABOUT GCE KARAD

The Government college of Engineering Karad (GCEK) was established in the 1960, is the premier institute in the western Maharashtra and completing 60 years. Government College of Engineering Karad has long and momentous history in engineering education. GCEK is offering 5 UG programs and 8 PG programs in engineering with Mechanical Engineering Department running 3 PG courses namely M. Tech. Heat Power Engg (HPE), Production Engineering (PE) and Design Engineering (DE). Mechanical Engineering Department has 17 Labs out of which 4 are research Labs. It has well established Centre of Excellence for CIM. Also, a new Centre of Excellence is proposed for ROBOTICS. The institute is also recognised as leading Ph. D. centres of Shivaji University, Kolhapur (SUK). The institute is granted autonomy since 2015. Karad city is a historic place for tourism. This city is situated near the Pritisangam of famous rivers Koyana and Krishna. Koyana dam is about 60 kms from Karad. Where by hydroelectric projects major part of electricity is generated. The city is well connected by roads, rails and air route. The atmosphere of Karad is very pleasant. This place is 170 kms far from Pune and 70 kms from Kolhapur.

## ADDRESS FOR CORRESPONDENCE

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