



VISION

Excel in mechanical engineering education and research for overall sustainable development.

MISSION

Impart quality education to nurture globally competent and socially responsible mechanical engineers.

Foster research to address the technological needs that society faces.

ORGANIZING COMMITTEE

Chief Patron

Prof. (Dr.) R. Sasikumar
(Director, CAPE)

Patron

Prof. (Dr.) Z. A. Zoya
(Principal,
College of Engineering
Perumon)

Convenor

Prof. (Dr.) Dileeplal J.
(HoD - ME)

Coordinators

Prof. Shamnad M.
(Assistant Professor in ME)
Mob: 9495805914

Prof. Sony R.
(Assistant Professor in ME)
Mob: 9447865695

HOW TO APPLY

The candidates can register their names through the following link on or before 26/08/2021.

<https://forms.gle/uJy3xwKhinnWUcG37>

Email: fdpme@perumonec.ac.in

ONLINE FACULTY DEVELOPMENT PROGRAMME ON OPTIMIZATION TECHNIQUES

August 31 – September 04, 2021



Sponsored by

APJ Abdul Kalam Technological University,
Thiruvananthapuram



Organized by

Department of Mechanical Engineering
College of Engineering Perumon
(Under CAPE, Government of Kerala)
Perinad P. O., Kollam, Kerala – 691601
www.perumonec.ac.in

ABOUT THE INSTITUTE

College of Engineering Perumon was established in the year 2000 under the Co-operative Academy of Professional Education (CAPE), Govt. of Kerala. The college has registered speedy progress since then and it offers 4 undergraduate programmes (ME, EEE, ECE, and CSE) and a postgraduate programme (CSE) in affiliation with APJ Abdul Kalam Technological University (KTU). The college has attained ISO 9001:2015 certification and two undergraduate programmes (EEE and ECE) got accredited by NBA. The college has a distinctive academic stature in the arena of engineering institutions in the state.



ABOUT THE DEPARTMENT

The Department of Mechanical Engineering was established in the year 2011 offering B.Tech programme in Mechanical Engineering. With a right blend of theory and practice, this

programme has well laid itself as a prominent option for students. The department has a team of well qualified and experienced faculty in all streams of mechanical engineering who always stride for imparting quality education. State-of-the-art laboratories in the department help to mould engineering graduates as per the curriculum requirements. The department is continuously striving to achieve excellence in mechanical engineering education and research with service to the society.

ABOUT THE PROGRAMME

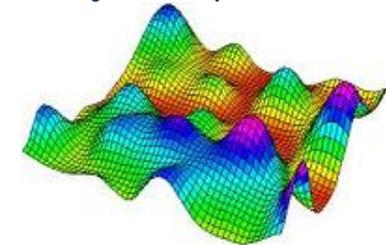
Optimization is the selection of a best element, with regard to some criterion, from some set of available alternatives. Optimization problems of sorts arise in all quantitative disciplines and the development of solution methods has been of interest for centuries. Optimization techniques are a powerful set of tools that are important in efficiently managing the resources. Applications of these techniques are most exciting, challenging, and of truly large scale when it comes to the domestic, commercial, and industrial problems in terms of both quality and quantity.

This FDP will give an opportunity to listen to the experts in this field and also to discuss basics and advanced

concepts of soft computing techniques and will explore new directions in their applications to engineering.

TOPICS

- Introduction to optimization
- Linear & nonlinear programming
- Integer programming
- Meta-heuristic optimization
- Simulation for optimization
- Role of artificial intelligence & machine learning in optimization problems
- Optimization methods for computational statistics and data analysis
- Multi-objective optimization



RESOURCE PERSONS

Faculty will be drawn from IIT, IIST, ISI, NIT, IIIT and other reputed educational institutions.

INTENDED AUDIENCE

This course is intended for faculty members from engineering and polytechnic colleges in all disciplines.

REGISTRATION FEE

No registration fee will be charged from participants.