COURSE OBJECTIVES

1. To understand the theory of optimization methods and algorithms developed for solving various types of optimization problems
2. To develop and promote research interest in applying optimization techniques in problems of Engineering and Technology
3. To apply the mathematical results and numerical techniques of optimization theory to concrete Engineering problems.

COURSE CONTENTS

1. Introduction to optimization techniques.
2. Unconstrained non-linear optimization problems
3. Constrained nonlinear optimization problems
4. Multi objective optimization problems
5. Evolutionary optimization algorithms
6. Adaptive Genetic Algorithm
7. Bayesian statistics as optimization technique
8. Artificial neural network
9. Optimization methods for inverse problems
10. Solving optimization problems using MATLAB

COURSE FACULTY

Eminent academicians and practising professionals from IITs, ISRO, NITs and GECs will be handling the sessions.

ELIGIBILITY

The course is interdisciplinary and is open to faculty members of AICTE approved institutions and R&D organizations.

FEE STRUCTURE

No course fee will be charged for participants from Government, Government aided and Government controlled engineering colleges. Participants from other colleges and R &D industry are required to pay a course fee of Rs. 1000/- and Rs.2500/-, respectively, payable at the time of registration. The maximum number of participants is limited to 30.

TA/DA/ACCOMMODATION

No TA/DA will be paid to the participants. Participants are requested to make their own arrangement for stay during course period. Lunch and tea/ coffee will be served to the participants.

IMPORTANT DATES

Receipt of applications: 18\textsuperscript{th} Feb: 2014 (by post)
Intimation of selection: 20\textsuperscript{th} Feb: 2014 (by email)
Confirmation of participation: 25\textsuperscript{th} Feb 2014 (by email)

ADDRESS FOR COMMUNICATION

Prof. G. Venugopal  
Asso. Professor  
Dept. of Mech. Engg  
RIT, Kottayam  
gvenucet@gmail.com

Prof. Sabu. K. T  
Asst. Professor  
Dept. of Mech. Engg  
RIT, Kottayam  
sabuktitus@gmail.com

ABOUT THE HOST INSTITUTION

Rajiv Gandhi Institute of Technology, named after the late Prime Minister Rajiv Gandhi, started functioning in 1991. The college is owned and managed by Govt. of Kerala and is one among the leading institutions in higher engineering education in Kerala. The institute offers Bachelor of Technology (B.Tech) course in five disciplines, Bachelor of Architecture (B.Arch) course, Master of Technology (M. Tech) course in five specializations, Master of Computer Applications (MCA) course and Doctoral programmes. The college is affiliated to Mahatma Gandhi University, Kottayam and recognized by All India Council for Technical Education. Over its 24 years of existence, RIT has built a strong reputation as one of Kerala's leading technical institutes.

ABOUT THE DEPARTMENT

The Department of Mechanical engineering started functioning from the inception of the institution and has recorded a consistent growth over the past years. The Department offers B.Tech degree course in Mechanical Engineering and M.Tech degree course in Industrial Engineering and Management with specialization. With a team of dedicated and highly qualified teachers, well equipped laboratories and workshops, the department provides an ideal platform for the future Mechanical engineers.

About TEQIP

Government of India has included RIT, Kottayam, under subcomponent 1.1 of TEQIP phase-II. The major activities under this scheme are faculty development and students employability.
Application Form

Short Term Training Programme (STTP) On Engineering Optimization: Methods and Applications
28-02-2014 to 06-03-2014

Name (in block letters) :
Designation :
Department :
Name of the institution :
Address for communication:

E-mail ID. :
Phone (Office) :
Mobile No. :
Highest academic qualification:
Teaching Experience : Years Date :

Food Preference : Vegetarian/Non-Vegetarian
Place: Date: Signature of Applicant

Declaration

The information furnished above is true to the best of my knowledge. I agree to abide by the rules and regulations governing the course. If selected, I shall attend the course for the entire duration. I also undertake the responsibility to inform the Co-ordinator sufficiently in advance, in case I am unable to attend the course.

Place: Date: Signature of the Applicant

Sponsorship Certificate

Certified that ---------------------------------------------
------------------------------------------------------is an employee of our institute and is hereby sponsored for the STTP on “Engineering Optimization: Methods and Applications” at Rajiv Gandhi Institute of Technology, Kottayam during the period from 28-02-2014 to 06-03-2014. Our institute is approved by AICTE. He/she will be permitted to attend the course, if selected.

Place: Date:

Signature of the Sponsoring Authority with seal

Short Term Training Programme (STTP)
On Engineering Optimization: Methods and Applications
28-02-2014 to 06-03-2014

Sponsored by
Technical Education Quality Improvement Programme (TEQIP)-Phase II

Organised By
Department of Mechanical Engineering
Rajiv Gandhi Institute of Technology
Government of Kerala
Velloor P.O, Kottayam – 686501
www.rit.ac.in

Course Coordinators
Prof. G. Venugopal
Prof. Sabu K.T