PREAMBLE
Optimization is ubiquitous and spontaneous process that forms an integral part of our day-to-day life. In the most basic sense, it can be defined as an art of selecting the best alternative among a given set of options. Optimization plays an important role in engineering designs, agricultural sciences, manufacturing systems, economics, physical sciences, pattern recognition and other such related fields. This STTP on “Recent Trends in Optimization Techniques and Applications” covers the topics related to optimization techniques like Evolutionary computation, machine learning, language technology/Natural Language Processing, information retrieval and text mining. This STTP provides a platform to explore the possibilities of collaborative research works in some of the emerging areas like bio-informatics and/or bio-text mining and language technologies. This STTP also motivates the researchers to pursue interdisciplinary research and gain research competence from Industry and academicians for developing optimization based methods for text processing, information extraction from biomedical texts, automatic summarization of biomedical texts and machine translation.

COURSE CONTENTS
- Data mining and Optimization techniques
- Harmony Search Based Optimization
- Code Optimization for Multi Core Systems
- Computational Intelligence and Optimization
- Heuristics Based Optimization
- Compiler Optimization
- Distributed Operating Systems and Its optimization
- Route optimization Techniques
- Web Services and Optimization
- Mathematical Foundations for Optimization Problems
- Search Based Software Engineering
- MATLAB Tool Support for Optimization
- WEKA – A Tool for Machine Learning and Data Mining

ELIGIBILITY
The Faculty Members/Research Scholars of AICTE approved Engineering Colleges / Polytechnics and Professionals from Industry are eligible to apply for the course. Teachers belonging to other disciplines may also apply if this course would supplement their research. Admission will be offered subject to the availability based on the TEQIP guidelines.

TA/DA and ACCOMMODATION
No TA/ DA will be paid to the participants as per TEQIP norms. Working lunch, tea and refreshments will be provided to all the participants. Accommodation will be provided to the selected outstation participants in the campus, upon request, at their own expenses.

REGISTRATION
Registration form can be downloaded from the Institute website (www.pec.edu). Interested participants shall apply through post/fax/email with the prescribed format duly signed and forwarded by the head of the sponsoring institution.

IMPORTANT DATES
Last date for registration : 29.12.2015

The selection of the participants will be intimated through e-mail only.
DECLARATION BY APPLICANT

The above mentioned information is true to the best of my knowledge and belief. I agree to abide by the rules and regulations governing the STTP Programme. I shall attend the programme for the entire duration.

Place:
Date:

Signature of the Applicant

SPONSORSHIP CERTIFICATE

Certified that Dr/Mr./Ms ____________________________ is an employee/Research Scholar of our institution and is sponsored to attend the TEQIP PHASE II sponsored STTP on "Recent Trends in Optimization Techniques and Applications". He/She will be permitted to attend the course fully, if selected.

Place:
Date:

Signature of the Sponsoring Authority with seal

ABOUT PUDUCHERRY

Heritage is one of the most precious gifts, Puducherry offers to its tourists and visitors. The coastal town of Puducherry with the French ambience is known for the serene atmosphere. The great poets Subramaniya Bharathi, Bharathidasan, Sri Aurobindo are some of the legends associated with Puducherry. Sri Aurobindo Ashram, Auroville, Bharathi Park, Ousteri Lake, Chunambar boat house, Botanical Garden, Manakula Vinayagar Temple, and Arikamedu (archaeological importance) are some of the major tourist attractions of Puducherry.

ABOUT THE INSTITUTION

Pondicherry Engineering College (PEC) is an autonomous institution started in the academic year 1985-86 under the seventh plan is promoted and fully funded by the Government of Puducherry. Ever since its inception, the college has registered speedy progress and it now offers eight undergraduate, thirteen post graduate courses, and PhD programmes in all branches of Engineering and basic Sciences. The college has been granted funds by NPIU under TEQIP Phase II and the project is under implementation. The college is situated at Pillaichavady, about 12 Km from Puducherry town and about 150 Km from Chennai along the scenic beauty East Coast Road (ECR) on the shores of the Bay of Bengal.

ABOUT THE DEPARTMENT

The Department of Computer Science and Engineering (CSE) was established during the inception of the college. The Department offers B.Tech (CSE), MCA, two M.Tech programmes with specializations in Distributed Computing Systems and Information Security and Ph.D programme.