

AICTE Training and Learning (ATAL) Academics Programme

On

Optimization Technique in Engineering Application [January, 18-22, 2021]

Coordinator

Dr. Satish Kumar

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Jamshedpur



Organized by

Department of Mechanical Engineering
National Institute of Technology Jamshedpur

Sponsored by

AICTE Training and Learning (ATAL)
Academy

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Resource Persons

The speakers will be drawn from IITs, NITs, CSIR Labs. Industries and other reputed organizations. Some speakers will be from National Institute of Technology Jamshedpur.

Important dates:

Registration Closes on: 11.01.2021

Acceptance: 14.01.2021

Notes: No registration fee.

Participants have to be faculty of
AICTE approved institutions/ Host
Institutions/Research Scholar/PG
Scholar

To join this Online FDP, you are requested to register your name by clicking the registration link:

<https://www.aicte-india.org/atal>

You are required to visit the AICTE-ATAL website, and complete the following steps for registration :

<https://atalacademy.aicte-india.org/signup>

1. Register as a participant → Fill your details
2. Select workshops → Choose **Jharkhand** in the Select State field, in the Month field **choose January, 2021.**
3. From the results → Look for the combination of the Institute name: "**National Institute of Technology Jamshedpur**" and the Title: "**Optimization Technique in Engineering Application [January, 18-22, 2021]**"; and apply for the workshop and confirm

Note: The Certificates shall be issued by AICTE Training and Learning (ATAL) academy to those participants who have attended the program with minimum 80% attendance and scored minimum 60% marks in the test conducted at the end of the online FDP.



About Institute and Jamshedpur

National Institute of Technology Jamshedpur was originally founded as Regional Institute of Technology in 1960. Later, upgraded to National Institute of Technology on 27th December 2002. In 2007 it is declared as Institute of National Importance. The institute offers B.Tech, M.Tech., Ph.D., M.C.A., M.Sc. degrees in various disciplines of Engineering, Sciences, Management and Humanities.

About the Department

The Department of Mechanical Engineering offers an undergraduate program in Mechanical Engineering and postgraduate programs in Computer Integrated Design and Manufacturing, Thermal Engineering and Energy System Engineering and PhD program in various research areas. The department also runs three year certificate course in Mechanical Engineering for the employees of Tata Steel under Continuing Education Program. The Department has well qualified and experienced faculties and well - established laboratories to meet the requirement of UG, PG and PhD students

About ATAL Academy AICTE

Training And Learning (ATAL) Academy was digitally announced with establishment of other three

Academies in the country at Vadodara, Guwahati & Trivendram by MHRD, Government of India on 24.9.2018. Some of the objectives of ATAL being:
‡To support technical institutions in fostering research innovation and entrepreneurship through training ‡To stress upon empowering technical teachers & technicians using Information & Communication Technology ‡To provide a variety of opportunities for training and exchange of experiences such as workshops, orientations, learning communities, peer mentoring and other faculty development programmes

Objective

The main objective of this short-term course is to provide a forum in which the participants obtain information about recent advances in optimization techniques. It also highlights successful applications of optimization in various areas. It comprises of sessions for the participants to introduce them to a number of modern optimization methodologies and their application/case studies from a wide variety of real-world interdisciplinary engineering problems. Owing to the interdisciplinary nature of this course, participants across the disciplines will be able to attend, appreciate and augment their

knowledge to keep with the emerging advanced techniques.

Topics of Training Course:

- Optimization Techniques –Introduction
- Applications of optimization methods
- Multi-objective Optimization
- Artificial Intelligence
- Error and Uncertainty analysis
- Scientific Document Processing Tools
- Numerical Optimization and Applications with Lab classes
- Neural network based and fuzzy based optimization
- Guidelines on publishing research papers.
- Hands-on training using Software

Conduct of Test and Issuance of Certificate

- A test shall be conducted at the end of the program.
- The certificate shall be issued to those who have attended the program without any absenteeism and scored minimum 60% marks in the test.

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