



**NITTTR
BHOPAL**



GUJ-8/2025-2026

Emerging Trends and Practices in Optimization and Sustainable Technology

02-06-2025 to 13-06-2025

EC Ahmedabad

<https://erp.nitttrbpl.ac.in/poc2025/?id=regGUJ-8>

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Rationale

Optimization in engineering design is the final and most important stage in the design process. The primary objective of this program is to make the participants aware of the classical and evolutionary optimization techniques and demonstrate their use on different application problems related to sustainable technology areas. Deliberation in different sessions during the program will also cover ongoing research activities in different technology disciplines with applications.

Programme Outcomes

1. Apply Classical and Evolutionary optimization methods
2. Analysis of the given problem and formulate it as an optimization problem
3. Solve problems using optimization techniques and software tools
4. Evaluate the results and interpret them.

Programme Content

Introduction to optimization techniques and classical optimization:
Single variable unconstrained optimization,
Multi- variable unconstrained optimization,
Constrained optimization;
Metaheuristic optimization methods and Evolutionary Optimization:
Genetic Algorithm for Optimization,

Target Group

Faculty of all disciplines

Coordinator & Co-Faculty

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Expert



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An Online Training Portal of NITTTR Bhopal
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