



### **Govt. Polytechnic Nashik**

Government Polytechnic Nashik was established in the year 1980. The Government of Maharashtra allotted 30 Acres of land for the majestic & sprawling Govt. Polytechnic campus. Initially diploma programme in Civil Engineering with 60 intake was introduced in 1980 & now the Institute conducts Ten regular diploma programmes in conventional and diversified areas with total intake of 810. Government of Maharashtra awarded Academic Autonomy to this Institute from the Academic Year 1995-96. Government of Maharashtra awarded 'Best Polytechnic Award' to this institute for the year 2001. Institute also got ISTE Narsee Monjee "Best Polytechnic-2011" award.

Academic Buildings



### **Institute's Vision**

To be a premier Technical Training and Development Institute catering to the skill and professional development in multi-domain for Successful employment/self-employment by offering certified and accredited NSQF compliant programmes. The Institute shall be the center for Excellence in skill development and community development through different training programmes, business incubation and Entrepreneurship development.

### **Dept. of Mechanical Engineering**

Dept. of Mechanical Engineering was established in 1989. The dept. is running with intake of 120. **Dept. is accredited for 6 years by NBA.** The dept. is well equipped with all modern labs and qualified faculties to fulfill the requirement of the Programme. Government of Maharashtra has sanctioned a new programme in Mechatronics Engineering from current academic year.

### **Department Vision**

The Department envisions being the center for excellence in training and entrepreneurship development in the field of emerging areas in Mechanical Engineering like automation and robotics. The department shall be the center for innovation and business incubation leading to entrepreneurial activity.

### **Patrons**

#### **Dr. Abhay Wagh**

Director, Directorate of Technical Education, Mumbai

#### **Mr. Pramod Naik**

Joint Director, Directorate of Technical Education, Mumbai.

#### **Prof. Dnyandeo Nathe**

I/C, Joint Director, Regional Office of DTE Nashik & Principal, Govt. Polytechnic, Nashik

#### **Dr. Chandrakant Seemikeri**

Head, Department of Mechanical Engineering (G.P. Karad)

#### **Mr. R. N. Khadse (Convenor)**

Head, Department of Mechanical Engineering.

### **Coordinator**

#### **Dr. Anil G. Patil**

Lecturer in Mechanical Engineering Department

### **Co-coordinator**

#### **Mr. Deepak Patil**

Lecturer in Mechanical Engineering Department

### **Organizing Committee**

Mr. P. G. Kochure

Mr. R. M. Nafade

Mr. S. V. Gaydhani

Mr. D. P. Khadse

Mr. S. V. Medhe

Mr. P. N. Ghotkar

Dr. S. J. Gorane

Mrs. V. S. Jadhav

Mr. D. D. Thorat

Dr. K. A. Jagtap

Mr. V. H. Choudhary

Mr. D. V. Dhabade

Mr. Y. D. Khode

Mr. M. S. Thakur

Mrs. A. R. Hagwane

### **AICTE-ATAL**

AICTE Training and Learning Academy is established with the vision to empower the faculty to achieve goals of their higher education such as access, equity and quality. The objective of academy is to set up an Academy which will plan and help in imparting quality technical education in the country.

A National Level AICTE- ATAL Academy's  
One Week Faculty Development Programme

On

## **“Research Methodology and Optimization Techniques” (RMOT-2021)**

Through online Mode

(13<sup>th</sup> December, 2021 – 17<sup>th</sup> December 2021)

Sponsored and Approved by



All India Council for Technical Education  
Training and Learning Academy

Organized by



Department of Mechanical Engineering  
(NBA Accreditation for 6 Years)

**Government Polytechnic, Nashik**  
(An Academically Autonomous Institute of  
Government of Maharashtra)

Samangaon Road, Nashik Road, Nashik – 422 101

Web: [www.gpnashik.ac.in](http://www.gpnashik.ac.in)

## About the Course

This course is designed to impart appropriate knowledge skill and attitude in “**Research Methodology**”. In this context a training will be provided in qualitative and quantitative methods along with Statistical method/packages across the various fields of engineering sciences and technology is designed.

At the end of this course the participants will able to formulate research Problem, design and develop conceptual framework, conduct field work, collect data, process the data, analyze and interpret the results to draw valid conclusions using Research methodologies.

## Objectives

- Research Methodology: An Overview
- Literature Review- Formulating a research problem
- Quantitative/Qualitative method of data collection.
- Analysis of data-Interpreting using statistical method/ packages.
- Reverse Engineering Research Methodology
- Research Findings
- Elementary Optimization Techniques

## Eligibility Criteria for Participants

The faculty members of the AICTE approved Institutions, Research scholars, PG Scholars, Participants from Government, Industry (Bureaucrats/Technicians/Participants from Industry etc.) and staff of host Institutions. Not more than 30% from Host Institution. Maximum 200 participants (minimum 50) may be allowed to attend (approved on

portal) online FDP on a first come first serve basis however AICTE officials may be allowed to attend over and above 200 number.

## Registration

- This course is free for all Participants.
- Intimation regarding selection will be sent to the candidates via email as per the schedule.
- **Registration Through ATAL Portal only**  
Visit <https://atalacademy.aicte-india.org/signup> by creating your login credential and select this FDP. It will be approved by the Coordinator through Coordinator Login.

## Test & Certificate

Certificates will be given to registered participants & subsequently approved by the coordinator, provided participants obtain 80% attendance, 60% marks in assessment and Feedback given by participants on Portal only.

## Important Dates

Last date of Online Registration:—9<sup>th</sup> December. 2021  
Intimation to selected candidate:—10<sup>th</sup> December. 2021

## Address for Communication

### Coordinator

#### Dr. Anil G. Patil

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### Co-coordinator

#### Mr. Deepak A. Patil

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## Session Plan (Tentative)

Day- 1	1	Inauguration/ Expert Talk
	2	Research Methodology: An Overview
	3	Literature Review
Day- 2	4	Formulating Research problem
	5	Design of Experiments -1, Problem,
	6	Design of Experiments, Problem, Case studies-1 with numerical
Day- 3	7	Various elementary Research Optimization Techniques. PSO, GA
	8	Taguchi Techniques
	9	Minitab Hands on Experience
Day- 4	10	Stress management, Meditation/Human Values and Ethics,
	11	Reverse Engineering Methodology
	12	Minitab Hands on Experience
Day- 5	13	Various parameters , Measurements and data collections
	14	Response surface methodology and implementation
	15	Valedictory, Feedback & Test

## Resource Persons

- The sessions will be handled by experts in different fields of Research Methodology in engineering sciences and technology.