



Government Polytechnic Nashik

Government Polytechnic Nashik was established in the year 1980. The Government of Maharashtra has allotted 30 Acres of land for the majestic & sprawling institute campus. The institute conducts eleven regular diploma programmes in conventional and diversified areas with a total sanctioned intake of 810. The government of Maharashtra awarded Academic Autonomy to this Institute from the Academic Year 1995-96. Six diploma programmes are accredited by NBA New Delhi. Government of Maharashtra awarded the 'Best Polytechnic Award' to this institute for the year 2001. Institute also received ISTE Narsee Monjee "Best Polytechnic-2011" award.

Nashik

Nashik city has its own mythological, historical, social, and cultural importance. Temples and ghats on the banks of Godavari River have made Nashik one of the holiest places all over the world. Kumbh Mela is held here once in 12 years. Presently, city has developed into a metropolis with a population of more than 15 lakh. Nashik is vibrant & active on the industrial front with three major MIDC namely, Sinnar, Satpur, & Ambad. Recently the city is declared as one of fastest-growing city in the world & also on the list of smart cities under the scheme of the Government of India. The city houses a large number of private and government educational institutions offering higher education in Medicine, Engineering & Technology, Architecture, Pharmacy, Military Management among others. The city has become the center of attraction because of its beautiful surroundings with a cool & pleasant climate throughout the year.

Dept. of Electronics & Telecomm. Engineering

Department of Electronics and Telecommunication was established in 2002. The department has sanctioned intake of 120. **This programme is accredited till 2025 by NBA.** The department is well equipped with all modern infrastructure, amenities and well qualified staff to fulfill the requirement of the course.

Vision of Department

To be the Centre for Electronics and Telecommunication Engineering supporting to the Multi-Disciplinary Problem Solving through Outcome and Practice based environment and with Focus on the requirements of Digital India.

Mission of Department

Department of Electronics & Telecomm. Engg. is committed-

- ❖ To provide Diploma Engineering Education and Skill Education for Manpower to the Industry and Society..
- ❖ To Inculcate Entrepreneurship abilities.
- ❖ To prepare Life-Long Learners by creating the Establish the Outcome and Practice Based Learning Environment.
- ❖ To Develop Professionalism, Ethics and Good Individual Citizen.

Chief Patron

Dr. Vinod M. Mohitkar

Director, Directorate of Technical Education, Mumbai.

Patrons

Dr. Sunil S. Bhamare

Joint Director, Directorate of Technical Education, Mumbai.

Dr. Goraksh V. Garje

Joint Director, Regional Office, DTE Nashik & Principal, Govt. Polytechnic, Nashik.

Chief Coordinator

Dr. Prerana V. Rathod

Head, Department of Elex.& Telecomm. Engineering

Coordinators

Dr. Jayant G. Joshi (07875276136)

Dr. Mahendra V. Patil (09623757920)

Mr. Dinesh B. Borude (09970398106)

Government Polytechnic, Nashik

Chehedhi (Bk.), Samangaon Road, Nashik Road,
Nashik- 422 101 (MS).

For any queries please feel free to mail us on:

gpnetcfdp24@gmail.com

A State Level Faculty Development Programme
on

Design and Development of Microstrip Patch Antennas and Wearable Antennas for Wireless Communication

(26th February, 2024 – 1st March, 2024)

Approved & Sponsored by



**Directorate of Technical Education,
Maharashtra State, Mumbai**

Organized by



**Department of Electronics &
Telecommunication Engineering**

(NBA Accreditation: 2019 to 2025)

Government Polytechnic, Nashik

(An Academically Autonomous Institute of Govt. of Maharashtra)

Vision of Institute

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.

Mission of Institute

The Government Polytechnic Nashik, an autonomous institute of Government of Maharashtra has the mission to provide education for skill development, engineering diploma and continuing education programmes for enhancement of employability skills of the aspirants in the job/self-employment through continually developing quality learning systems. The institute aims at holistic and student centric education in collaboration with business, industry and having practice based education.

About the Course

Microstrip Patch Antennas (MPAs) are in high demand due to the massive expansion in wireless 4G/5G communication. MPAs offer multiband frequency response, high gain, high directivity, and they are miniaturized in size. These antennas establish a reliable wireless communication link for ISM, BAN, Wi-Fi, Wi-Max, WLAN, IoT, and many other applications. Additionally, there is a need for fabrics-based wearable, flexible, and covert body worn MPAs in the wearable technology, body-centric communication network, and body worn gadgets. These days, MPAs are made using 3D printing in addition to traditional manufacturing methods. The primary challenges in the 21st century are choosing the right material, using the best production technology, and validating the results to obtain application-specific MPAs. This course focuses on the design, development, testing, and recent advancements of MPAs. It also aims to help participants comprehend the MPAs' equivalent circuit analysis to validate practical and theoretical results. In order to meet the needs of the telecommunication industry, medical as well as the defense and military sectors, this course will offer a clear view of recent advances and border regions of MPAs.

Objectives

- To prepare Polytechnic teachers to face the forthcoming challenges about developments in MPAs.
- To illustrate the latest trends and state-of-the art in the field of MPAs used in 4G/5G applications.
- To explore design, simulation, development and testing of different MPAs used in telecommunication sector.
- To appraise material selection, fabrication process, equivalent circuit analysis and optimization of MPAs.

Contents of the Course

Basics of antennas, wearable cloth-based MPAs, Design of different types of antennas, metamaterial antennas, material selection, simulation and testing of MPAs, equivalent circuit analysis. 3D printed antennas; optimization techniques used in MPAs.

Resource Persons

Academic experts from premier Institutions like NITs, NITTTR and Industry experts from well known Industries will deliver their expert talk on current technologies.

Registration Rules

- The course is open only for Faculty Members of Government/Government aided Polytechnics from Maharashtra state.
- There is NO registration fee for the course.
- Participant have to upload the photograph of a registration form on a given registration link after sign of the Principal of respective Institution.
- The course will be conducted in offline mode.
- After confirmation of registration, link of whatsapp group will be mailed to respective participant's registered mail id for further communication from the organizing team.
- Participant limit for this course is 25 only.
- Please follow the instructions and cooperate for smooth conduction of the program. For further queries, please contact the coordinator.
- All the rights of this course are held with the authority of Government Polytechnic Nashik.

Online Registration Link

<https://forms.gle/1sMbUXJHBm59kbow5>

Important Dates

- Last date of Online Registration: 15th February, 2024.
- Intimation to selected candidate (by their registered mail only): 17th February 2024.

Target Groups

Teaching faculties from Government Diploma Institutions in the stream of Electronics Engineering and allied Branches/ Instrumentation Engineering/Electrical Engineering/ Computer Engineering (interested in IoT domain).

Organizing Committee

Shri. S. S. Mahajan

Smt. M.M. Shinde
Smt. S.M. Solanki
Shri. M.D Raut
Smt. P.S. Cheke

Shri. V.P. Tayade
Shri. V.S. Thakare
Smt. S.A. Waghulde
Shri. S.R. Devkate

REGISTRATION FORM

A State Level Faculty Development Programme
on
**Design and Development of Microstrip
Patch Antennas and Wearable
Antennas for Wireless Communication**
(26th February, 2024 – 1st March, 2024)

Approved & sponsored by

**Directorate of Technical Education,
Maharashtra State, Mumbai**

Organized by

**Department of Elex. & Telecomm. Engineering
Government Polytechnic, Nashik**

(An Academically Autonomous Institute of Govt. of Maharashtra)

Participant's Full Name: _____

Designation: _____

Qualification: _____

Specialization: _____

Organization: _____

Address: _____

Experience (Teaching/Industrial): _____

Contact No. _____

Email id: _____

I hereby declared that above information is true with best of my knowledge.

Signature of Participant

This Application is recommended and forwarded.

Date: _____ Place: _____

Signature of Head of Institution with seal

(Photocopy of this form can be used)