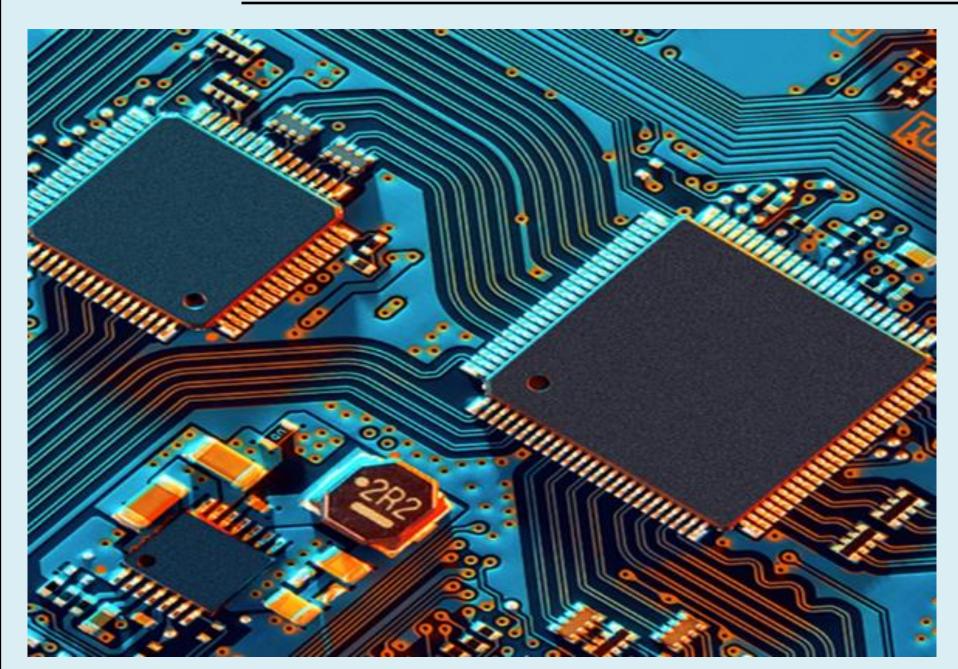


# माधव प्रौद्योगिकी एवं विज्ञान संस्थान, ग्वालियर (म.प्र.), भारत MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR (M.P.), INDIA

**Deemed University** 

(Declared under Distinct Category by Ministry of Education, Government of India)
NAAC ACCREDITED WITH A++ GRADE



#### **EDITORIAL BOARD**

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- ➤Dr. Varun Mishra (E-newsletter Coordinator)

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- Snehal Bhardwaj (EC − 2<sup>nd</sup> year)
- Shaivya Kushwah (EC 2<sup>nd</sup> year)

Contact: electronicsnewsletter@gmail .com

DEPARTMENT OF ELECTRONICS ENGINEERING E-NEWSLETTER April – June 2025



# माधव प्रौद्योगिकी एवं विज्ञान संस्थान, ग्वालियर (म.प्र.), भारत MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR (M.P.), INDIA



Deemed University
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NAAC ACCREDITED WITH A++ GRADE

## **Department Vision**

"To Prepare Globally Competent Electronics Engineers for Industrial Challenges and Societal needs."

## **Department Mission**

- > To provide quality education through need based curriculum and effective teaching learning process.
- > To imbibe professional ethics, leadership and entrepreneur skills with a passion for lifelong learning.
- > Strengthening of employability skills through multidisciplinary projects and internships.
- > To inculcate the spirit of innovation and research to serve the needs of the society and industry.



# माधव प्रौद्योगिकी एवं विज्ञान संस्थान, ग्वालियर (म.प्र.), भारत MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR (M.P.), INDIA

MITS

Deemed University
(Declared under Distinct Category by Ministry of Education, Government of India)
NAAC ACCREDITED WITH A++ GRADE

## PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)

## **PEO-1**

Graduates of the program will be successful global collaborators with thriving technical and professional careers in the field of Electronics Engineering.

## **PEO-2**

Graduates will have the ability to adapt latest technologies to contribute for sustainable development of society with effective research and entrepreneurship attitude.

## **PEO-3**

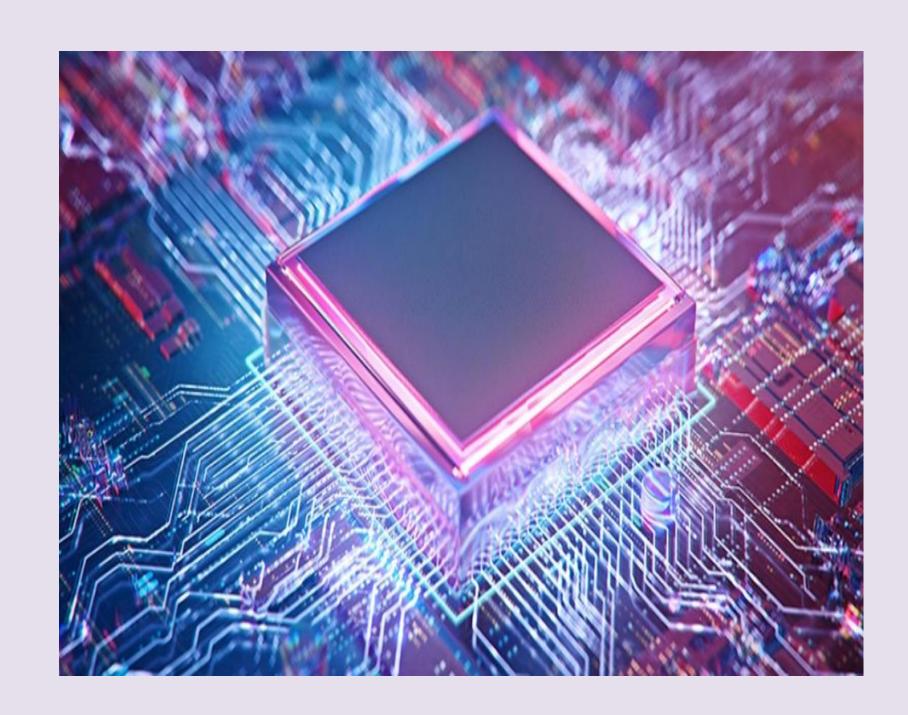
Graduates will have the teamwork, professional excellence, communication, and interpersonal skills to enable them to work effectively with interdisciplinary teams in Industry, Government, and Academia.



## **APRIL - JUNE 2025**

# **CONTENTS:**

- 1. Departmental Achievement
- 2. FDP/STC attended (Outside/Inside) the Institute
- 3. Expert talk given (Outside/Inside) the Institute
- 4. NPTEL/ATAL/Internshala courses attended
- 5. Publications SCI/Scopus/UGC with DOI Number
- 6. Faculty Awards & Recognitions
- 7. Student Club Activities
- 8. Departmental Activity
- 9. Student Achievements





#### **APRIL - JUNE 2025**

# **DEPARTMENTAL ACHIEVEMENT**

# Electronics Engineering program is NBA-accredited till 2028



चौथा तल, ईस्ट टावर, एन. बी. सी. सी. प्लेस, भीष्म पितामह मार्ग, प्रगति विहार, लोधी रोड़, नई दिल्ली -110003

#### NATIONAL BOARD OF ACCREDITATION

NBR ATIONAL BOARD

Date: 02-06-2025

File No: 27-65-2010-NBA

The Principal,

Madhav Institute of Technology & Science, Gwalior M.P- 474005

Subject: Accreditation status of programs applied by Madhav Institute of Technology & Science, Gwalior M.P. 474005.

Sir,

This has reference to your application I.D. No. 9551-07/10/2024 seeking accreditation by National Board of Accreditation (NBA) to UG Engineering programs in Tier I applied by Madhav Institute of Technology & Science, Gwalior M.P- 474005.

An Expert Team conducted onsite evaluation of the programs from 11<sup>th</sup> to 13<sup>th</sup> April, 2025. The report submitted
by the Expert Team was considered by the concerned Committees constituted for the purpose in NBA. The Competent
Authority in NBA has approved the following accreditation status to the programs as given in the table below:

SI. No.	Name of the Program(s) (UG)	Basis of Evaluation	Accreditation Status	Period of validity	Remarks
(1)	(2)	(3)	(4)	(5)	(6)
1.	Computer Science and Engineering	Tier I January 2016 Document	Accredited	Academic Years 2025-2026 to 2027-2028 i.e., upto 30/06/2028	Accreditation status granted is valid for the period indicated in Col.5 or till the program has the approval of the Competent Authority, whichever is earlier
2.	Electronics Engineering		Accredited		

- It may be noted that only students who graduate during the validity period of accreditation, will be deemed to have graduated with an NBA accredited degree.
- 4. The accreditation status awarded to the programs as indicated in the above table does not imply that the accreditation has been granted to Madhav Institute of Technology & Science, Gwalior M.P. 474005 as a whole. As such the Institution should nowhere along with its name including on its letter head etc. write that it is accredited by NBA because it is program accreditation and not institution accreditation. If such an instance comes to NBA's notice, this will be viewed seriously. Complete name of the program(s) accredited, level of program(s) and the period of validity of accreditation, as well as the Academic Year from which the accreditation is effective should be mentioned unambiguously whenever and wherever it is required to indicate the status of accreditation by NBA.
- 5. The accreditation status of the above programs is subject to change on periodic review, if needed by the NBA. It is desired that the relevant information in respect of accredited programs as indicated in the table in paragraph 2, appears on the website and information bulletin of the institute.



Tel: +91 11 2436 0620-22, 2436 0654; Telefax: +91 11 4308 4903

2

- 6. The accreditation status awarded to the programs as indicated in table in paragraph 2 above is subject to maintenance of the current standards during the period of accreditation. If there are any changes in the status (major changes of faculty strength, organizational structure etc.), the same are required to be communicated to the NBA, with an
- A scanned copy each of the Report of Chairperson of the Visiting Team and Evaluators' reports in respect of the pove programs can be seen by the Institute at the tab-Accreditation Reports on the Institute's eNBA dashboard.
- If the Institute is not satisfied with the decision of NBA, it may appeal within thirty days of receipt of this communication on eNBA portal alongwith Report of the Expert Team, giving reasons for the same and by paying the requisite fee.

Yours faithfull

Ofiller

Member Secretary

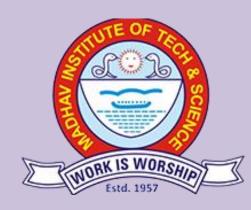
#### Copy to:

- The Director,
   Directorate of Technical Education,
   Department of Technical Education
   Skill Development & Employment
   4th Floor, Satpura Bhawan, Bhopal
   Madhya Pradesh 462004.
- Accreditation File
- 3. Master Accreditation file of the State



# FDP/STC ATTENDED (OUTSIDE/INSIDE) THE INSTITUTE

- 1. Dr. Varun Mishra attended one week Faculty Development Program on "Nanotechnology for VLSI: Fabrication and Challenges" jointly organized by Electronics and ICT Academy, NIT Patna and Malla Reddy College of Engineering and Technology, Hyderabad, Telangana under the "Scheme of financial assistance for setting up of Electronics and ICT Academies (Phase-II)" by the Ministry of Electronics and Information Technology (Meity), Government of India from O3rd February 07th February, 2025.
- 2. Dr. Varun Mishra attended two weeks Faculty Development Program on "Semiconductor Devices Circuits & Sensor: Applications & Research Perspective" jointly organized by Electronics and ICT Academy, NIT Patna, IIITDM Jabalpur, MNIT Jaipur, IIT Kanpur and IIT Roorkee under the "Scheme of financial assistance for setting up of Electronics and ICT Academies (Phase-II)" by the Ministry of Electronics and Information Technology (Meity), Government of India from 09th June, 2025 20th June, 2025.
- 3. Dr. Varun Mishra attended Faculty Development Program on "Semiconductor Devices for Next Generation Field Effect Transistors (More than Moore): A Physics Perspective" through NPTEL during January-June 2025.
- **4. Dr. Mukesh Kumar Mishra** attended Faculty Development Program on "IoT and ML for Advanced Biomedical Signal Processing" jointly organized by ABV-IIITM Gwalior and E&ICT Academy, IIITDM Jabalpur, 15-.24 Jan. 2025.



# FDP/STC ATTENDED (OUTSIDE/INSIDE) THE INSTITUTE

- **5. Dr. Kumar Gaurav** attended Faculty Development Program on Emerging Frontiers in AI, Quantum, and Nature-Inspired Computing: Bridging Future Technologies organised by Netaji Subhas University of Technology, Dwarka, Delhi in collaboration with E&ICT Academy IIT Roorkee (2nd-7th June, 2025).
- 6. **Dr. Kumar Gaurav** attended two weeks FDP on "Semiconductor Devices Circuits & Sensor: Applications & Research Perspective" jointly organized by Electronics and ICT Academy, NIT Patna, IIITDM Jabalpur, MNIT Jaipur, IIT Kanpur and IIT Roorkee under the "Scheme of financial assistance for setting up of Electronics and ICT Academies(Phase-II)" by the Ministry of Electronics and Information Technology (MeitY), Government of India (09th June, 2025 20th June, 2025).
- 7. Dr. Jaydeep Parmar attended two weeks Faculty Development Program on "Semiconductor Devices Circuits & Sensor: Applications & Research Perspective" jointly organized by Electronics and ICT Academy, NIT Patna, IIITDM Jabalpur, MNIT Jaipur, IIT Kanpur and IIT Roorkee under the "Scheme of financial assistance for setting up of Electronics and ICT Academies (Phase-II)" by the Ministry of Electronics and Information Technology (MeitY), Government of India from 09th June, 2025 20th June, 2025.



# EXPERT TALK GIVEN (OUTSIDE/INSIDE) THE INSTITUTE

1. Dr. Kumar Gaurav gave an Expert talk in the workshop on "Atomistic Simulations for Sensing and Supercapacitor Devices: Tools, Techniques, and Emerging Trends (AS³T³-2025)", at ABV-IIITM Gwalior







# NPTEL/ATAL/INTERNSHALA COURSES ATTENDED

- **1. Dr. Hemant Choubey** attended NPTEL-AICT course on "Yoga and Positive Psychology for Managing Career and Life".
- 2. Dr. Varun Mishra attended NPTEL Online Certification Course on "Semiconductor Devices for Next Generation Field Effect Transistors (More than Moore): A Physics Perspective".
- 3. Dr. Varun Mishra attended NPTEL Online Certification Course on "Digital Design with Verilog".
- 4. Dr. Mukesh Kumar Mishra attended NPTEL Online Certification Course on "Ethics in Engineering Practice".
- **5. Dr. Mukesh Kumar Mishra** attended NPTEL Online Certification Course on "Digital Communication using GNU Radio".
- **6. Dr. Mukesh Kumar Mishra** attended NPTEL Online Certification Course on "Principles of Communication Systems I".
- 7. Prof. Madhav Singh attended NPTEL-AICTE course on "Integrated Circuits, Mosfets, OP-Amps and their Applications".
- 8. Dr. Jaydeep Parmar attended NPTEL Online Certification Course on "Biomedical Signal Processing".



## PUBLICATIONS SCI/SCOPUS/UGC WITH DOI NUMBER

- **1. Varun Mishra**, Anant Negi, Vikas Rathi, Yogesh Kumar Verma, and Chandni Tiwari. "Revolutionizing Low-Power Efficiency: Unveiling the Potential of Mg2Ge as Source Material in Double Gate Vertical TFET Design." Micro and Nanostructures (2025): 208214, <a href="https://doi.org/10.1016/j.micrna.2025.208214">https://doi.org/10.1016/j.micrna.2025.208214</a>.
- 2. Kumar Gaurav and A. Srivastava, "Bromobenzene based Single Electron Transistor Sensor for Toxic Gases Detection: A Computational Insight," Physics of the Solid State (SCI) Accepted (In press).
- 3. Hma Salah, Nasih, Hma Salah, Nasih, Yesudasu Vasimalla, Hogr M. Rasul, **Baljinder Kaur**, Chella Santhosh, Ramachandran Balaji, S. R. Srither, and Santosh Kumar. "CsPbBr3-Quantum Dots-Immobilized Optical Fiber-Based Plasmonic Biosensor for Pseudomonas Bacteria Detection." *Plasmonics* (2025): 1-14, https://doi.org/10.1007/s11468-025-03155-5.
- 4. Yesudasu Vasimalla, **Baljinder Kaur**, Hogr M. Rasul, Chella Santhosh, Ramachandran Balaji, S. R. Srither, and Santosh Kumar. "High-sensitivity optical fiber-based SPR sensor for early cancer cell detection using cerium oxide and tungsten disulfide." *Plasmonics* (2025): 1-14, <a href="https://doi.org/10.1007/s11468-024-02718-2">https://doi.org/10.1007/s11468-024-02718-2</a>.



## **FACULTY AWARDS & RECOGNITIONS**







# NPTEL ONLINE CERTIFICATION

(Funded by the MoE, Govt. of India)



This certificate is awarded to

#### **VARUN MISHRA**

for successfully completing the course

Semiconductor Devices for Next Generation Field Effect Transistors (More than Moore): A Physics Perspective

with a consolidated score of 79

9 %

Online Assignments | 21.56/25 | Proctored Exam | 57/75

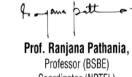
TOPPER 5%

Total number of candidates certified in this course: 238



Jan-Apr 2025

(12 week course)





Indian Institute of Technology Roorkee



Roll No: NPTEL25EE75S546400114

To verify the certificate



No. of credits recommended: 3 or 4



## STUDENT CLUB ACTIVITIES

- **1. Hardeep Kansana** coordinated a successful event for Funtech Club, managing logistics, promotion, and execution, resulting in high participation and recognition through an official certificate.
- **2. Patel Somesh** coordinated an event "SCAM-SHIELD: Discovering Financial Crimes" organized by Finance Club & Department Level Group (DLG) under the capacity of Graphic Head.
- 3. Harshit Dharm Krishna coordinated an event "BRAIN BYTE 4.0" organized by FUNTECH CLUB.





## STUDENT ACHIEVEMENTS

- 1. Hardeep Kansana secured 1<sup>st</sup> place in 4×100m relay at 32nd Kshetriya Athletics Meet 2019 (U14) and won bronze medals in high jump and long jump at zonal level.
- 2. Kanishka Shivhare successfully completed NPTEL Online Certification Course titled "Fuzzy Sets, Logic and Systems & Applications" and awarded Elite + Gold + Top Performer certificate placed in the Top 5% of 1807 certified participants nationwide.



## STUDENT ACHIEVEMENTS





## Elite

## **NPTEL ONLINE CERTIFICATION**

(Funded by the MoE, Govt. of India)



This certificate is awarded to

#### KANISHKA SHIVHARE

for successfully completing the course



Fuzzy Sets, Logic and Systems & Applications

with a consolidated score of

Online Assignments | 24.38/25 | Proctored Exam | 73.5/75

TOPPER

Total number of candidates certified in this course: 1807



Prof. B. V. Ratish Kumar Chairman, Centre for Continuing Education Jan-Apr 2025

(12 week course)





Roll No: NPTEL25EE40S546400376

To verify the certificate



No. of credits recommended: 3 or 4