ABOUT THE INSTITUTE:

Institute of Technology, established in 1995, is the flagship Institute of the Nirma University. The Institute is recognized for robust academic programmes, quality teaching-learning process and fostering overall personality development in its students. A blend of young and experienced faculties, committed to teaching and research; have proven to be the best mentors to budding engineers. The Institute offers multidisciplinary undergraduate, postgraduate and doctoral programmes in the discipline of Engineering and Technology. Discipline, ethical and professional work culture, and commitment to providing quality education are the hallmarks that define the Institute.

The Institute of Technology is a constituent institute of Nirma University which is NAAC 'A+' grade accredited university in the year 2022. The institute is ranked between 100 to 150 by the National Institute Ranking Framework (NIRF) making its mark among 4000 plus engineering colleges in the country. The Institute is consistently placed at the top by the ranking agencies at the state level and in Top 15 in the country, among self-financed colleges. All the BTech Programmes are accredited by the National Board of Accreditation (NBA) under Tier -I category.

Institute has implemented the National Education Policy 2020 for undergraduate students from the Academic Year 2022-23. The curriculum for the under graduate students shall be framed for preparing the professionals in cutting-edge areas that are fast gaining prominence. Important applications related to health, environment and the sustainable living shall be included in the curriculum for enhancing the employability of the youth.

THE DEPARTMENT

The departments have highly qualified faculty members, state of art laboratories and infrastructures. Continuing Education programs and customized training/ workshops are being organized for industry personnel on regular basis. Various Funded Research Projects and Consultancy projects are also taken up. Students of the department are actively involved in various extracurricular activities and extension activities.

Patron
Dr. Himanshu Soni
Director, School of Technology, Institute of Technology, Nirma University, Ahmedabad

Coordinator
Dr. Arvind R. Yadav
Associate Professor, E&I Dept., Institute of Technology, Nirma University, Ahmedabad

Co-coordinator
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Address
Department of Electronics & Instrumentation Engineering, Institute of Technology, Nirma University, S G Highway, Ahmedabad

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ATAL Academy Sponsored Online 6 DAYS FACULTY DEVELOPMENT PROGRAM ON

"AI and Digital Technologies for Sustainable Healthcare and Medical Technologies"

25th – 30th November, 2024

Organized By

Department of Electronics & Instrumentation Engineering
Institute of Technology, Nirma University
Sarkhej-Gandhinagar Highway, Ahmedabad- 382 481, Gujarat, India
Ph: +91-2717-241911/12/13/14/15
Website: www.nirmauni.ac.in

COURSE OBJECTIVE:

The ATAL Academy sponsored 6 Days Faculty Development Program (FDP) on " AI and digital technologies for sustainable Healthcare and Medical Technologies " aims to equip participants with cutting-edge knowledge and skills in Healthcare and Medical Technology. The course objectives includes to gain foundational knowledge of artificial intelligence (AI), machine learning (ML), digital technologies and their applications in the healthcare sector. Explore the advancements in medical technologies, such as telemedicine, wearable devices, health monitoring systems, and their integration with AI for better healthcare outcomes. Further, to examine the ethical issues, privacy concerns, and regulatory frameworks related to AI in healthcare, including patient data protection, AI bias, and compliance with healthcare laws. Participants will gain insights into understanding AI and Digital Technologies in Healthcare, medical imaging technologies, future trends in AI for Healthcare, and Sustainable Healthcare.

COURSE OUTCOMES:

Upon completing this one-week faculty development program, participants will be equipped to analyze and choose the imaging technology for particular applications through practical strategies and tools. They will be capable of designing and implementing robust algorithms to enhance the image analysis and understanding, medical devise design, organizational resilience and ensure compliance with relevant legal and regulatory standards. Participants will integrate best practices for cyber-physical system, GAIT classification, digital healthcare solutions, contactless healthcare system, smart wearable, nanotechnology application in healthcare, and hardware design to support healthcare and med-tech applications into their curricula, fostering a culture of AI Driven healthcare and med-tech awareness within their institutions. Additionally, they will be prepared to evaluate and apply emerging technologies and methodologies to stay ahead while effectively collaborating with peers and industry experts to share knowledge and strategies in healthcare and med-tech domain.

WHO SHALL PARTICIPATE?

Professors/Associate Professors/senior Assistant Professors/ professionals from industry/ Research Scholars and Post Grad, who have exposure to the subject.

TOPICS TO BE COVERED:

➢ AI and Signal Processing for Healthcare

➢ Role of Multiomics in overall survival days prediction in globloytoma patients

➢ Role of AI in healthcare and life sciences

➢ Sustainable Healthcare Cyber-Physical Systems (H-CPS)

➢ Behavioral multi parametric pain assessment system

➢ Cardiovascular devices: Regulatory pathways and market entry strategies

➢ AI-Driven GAIT classification for health monitoring

➢ Smart Wearables: Issues and Progresses in PPG

➢ Digital health solutions to enable the transformation of healthcare

➢ Nano technology applications in healthcare

➢ AI powered contactless healthcare system for patient monitoring

➢ Hardware system design for healthcare applications

➢ Medical imaging technologies for enhancing healthcare sector

There is no registration and course fee. The mode of program will be Online only.

CONTACT INFORMATION:

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RESOURCE PERSONS:

Name: Dr. Mehul Raval
Designation & Organization: Professor, Ahmedabad University
Years of Exp: 27 Years

Name: Dr. Saraju Mohanty
Designation & Organization: Professor, University of North Texas
Years of Exp: 20

Name: Dr. Narendra Londhe
Designation & Organization: Professor, Department of Electronics & Communication Engineering, NIT Raipur
Years of Exp: 15

Name: Dr. Prateek Singh
Designation & Organization: Senior Technical Lead, Mercedes-Benz R&D India
Years of Exp: 5 Years and 6 Months

Name: Dr. Vineet Vashista
Designation & Organization: Associate Professor, IIT Gandhinagar
Years of Exp: 9

Name: Dr. Gaurav
Designation & Organization: Manger (Research & Innovation Division), Titan Company Limited
Years of Exp: 8 Years

Name: Dr. Shyamal Patel
Designation & Organization: SVP, Head of Science at Oura
Years of Exp: 20

Name: Dr. Chintan Bhatt
Designation & Organization: National Manager, RTEC Instruments, Bangalore
Years of Exp: 20

Name: Prof. (Dr.) Ram Bilas Pachori
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Years of Exp: 17

Name: Mr. Dhaval Mandalia
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Name: Dr. Linga Reddy Cenkeramaddi

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Years of Exp: 20

Name: Dr. Hitesh Shrimali

Designation & Organization: Associate Professor, School of Computing and Electrical Engineering, IIT Mandi

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Name: Dr. Vinod Kumar

Designation & Organization: Retired Professor & Deputy Director, IIT Roorkee

Years of Exp: 45