

Preamble

The Department of Electronics and Communication Engineering, Institute of Technology, Nirma University, Ahmedabad is actively involved in Research, Development, Training and consultancy work specially in the fields of VLSI Design, Embedded Systems, Communication and Machine Learning beside imparting quality education. Understanding of the concepts and advancements in machine learning for electronics engineers is essential to equip them with the skills necessary to leverage the power of data-driven solutions and optimize electronic systems in the evolving technological landscape. In this two weeks Short Term Training Program/ Refresher Course on “**Machine Learning for Electronics Engineers**”, the programme will explore the intersection of machine learning and electronics engineering, equipping you with the knowledge and skills to leverage machine learning techniques in your work.

The Programme

In today's rapidly evolving technological landscape, the integration of machine learning techniques has become increasingly vital in various domains. As electronics engineers, understanding and harnessing the power of machine learning can significantly enhance your ability to design, develop, and optimize cutting-edge electronic systems. This training program has been carefully crafted to provide you with a comprehensive introduction to the fundamental concepts, techniques, and applications of machine learning within the context of electronics engineering. Over the course of this program, the participants will get insights on core principles of machine learning, explore different algorithms and models, and showcase how they can be effectively applied to tackle real-world challenges in electronics engineering. The objective of the proposed short-term course is sharing the knowledge of cutting-edge research and developments in the field of machine learning in electronics engineering through the expert talks by the researchers and the practicing engineers from academia and the industry. The course will provide proper blend of academic research and practical applications through research talks and visits of industries and research organizations working in the domain of machine learning. It will provide the common platform for industrial experts, faculty members, practicing engineers and researchers to interact and update their knowledge.

Objectives

After successfully completing this course, the participant will be able to:

- Understand the fundamental concepts of machine learning, including supervised and unsupervised learning, model evaluation, and more.

- Gain proficiency in popular machine learning frameworks and tools, enabling you to implement and evaluate models effectively.
- Discover real-world applications of machine learning in electronics engineering.
- Apply machine learning techniques to real-world scenarios in electronics engineering.

Course Contents

The course is intended to discuss mainly on following issues with field visits and state of art technologies.

- Supervised and Unsupervised learning methods
- Evaluation and Validation of Machine Learning Models
- Popular Machine Learning Libraries and Tools
- Industrial Applications of Machine Learning
- Case-studies and industrial visits
- Hands-on exercises, hardware deployment and demonstrations

Faculty

The Programme will be conducted by experienced faculty members from Electronics and Communication Engineering Department and other Departments, and eminent Professors from well reputed organizations like IITs, NITs and experts from industries/ research organizations.

Registration Charges

₹ 5000/- for faculty member from other academic institutions

₹ 8000/- for members from industries and R&D organizations

₹ 3000/- for faculty member of Government Colleges

₹ 3000/- for full-time research scholars (pursuing Ph.D.)

Registration fee includes tea, lunch and course material.

All other expenses are to be borne by the participants.

Registration charges are non-refundable.

Important Dates

Last date of receiving application : 29/06/2023

Confirmation of selection by E-mail: 01/07/2023

Commencement of Programme : 03/07/2023

Eligibility for Admission

Faculty members from various engineering colleges, full-time research scholars (pursuing Ph.D.) working in relevant areas, professional from Industries and R&D organizations.

Travelling Allowance and Boarding Lodging

Participants are requested to make their own arrangements for boarding, and travelling. However, on request, the arrangement for accommodation can be made on chargeable basis.

APPLICATION FORM

ISTE Approved
Short Term Training Programme
on

Machine Learning for Electronics Engineers

3rd – 14th July, 2023

Under the Auspices
Internal Quality Assurance Cell
Organized by

Electronics and Communication Engineering
Department,
Institute of Technology,
Nirma University, Ahmedabad

1. Name:

2. Designation:

3. Qualification:

4. D.O.B.: Sex: Male / Female

5. Institution/:
Industry

6. Mailing Address:

Phone: Fax:

E-mail:

7. ISTE Membership:

8. Experience
Teaching : Years Months
Industrial : Years Months

9. Subjects Taught:

10. Hostel Accommodation required: Yes / No

11. Demand Draft Rs. No.
dated..... Bank

Place:

Date:

Signature of the Applicant

Certificate from Sponsoring Authority

This is to clarify that _____ is regular employee of our institution/industry and is hereby sponsored for the two week **ISTE Approved Short Term Training Program on "Machine Learning for Electronics Engineers"** at Institute of Technology, Nirma University from 3rd to 14th July, 2023. He / She will be permitted to attend the course for the entire duration, if selected.

Date: _____
Place: _____

Signature with Seal
Head of the Institution

How to Apply

Interested applicants are requested to fill-up the attached application form and return, along with, duly signed certificate of sponsoring authority (in case of faculty members from engineering colleges, professionals from industry and R&D organizations) or bonafide certificate issued by the authority (in case of full-time Ph.D. students) as applicable. The form shall be sent to the following address, so as it reaches on or before 26/06/2023. Also send a scanned copy of the form and DD as an advance copy through email.

Dr Ruchi Gajjar and Dr. Manish I. Patel

(Coordinators of the Programme)
Electronics and Communication Engineering Department,
Institute of Technology, Nirma University, S G Highway,
Ahmedabad- 382 481, Gujarat, India.
e-mail: ruchi.gajjar@nirmauni.ac.in
manish.i.patel@nirmauni.ac.in

Applicants should send the demand draft of applicable registration fees in favor of "Institute of Technology, Nirma University", payable at Ahmedabad.

The EC Department

The Department of Electronics and Communication Engineering was established in the year 1995. The department is accredited by National Board of Accreditation (NBA). Since its inception, the department is known for its credentials of inspirational teaching-learning and research environment. The curriculum is a mix of core and elective courses. The state-of-art laboratories at the department train the students to obtain sustainable solutions for Industrial and societal problems. The department offers BTech Programme in Electronics & Communication Engineering. Two MTech Programmes with specialization in VLSI Design and Embedded Systems. Department also offers Ph.D. programme. The department has strong linkages with the Industry, Academia, and Research Organization for training, consultancy, projects, internships, and placement. On the Research front, the department faculty members received research funding from ISRO, BRNS, DST, DRDO, etc.

About Nirma University

Nirma University is one of India's leading universities based in Ahmedabad (Gujarat). The University was established in the year 2003 as a Statutory University under a special act passed by the Gujarat State Legislative Assembly. It is recognized by the University Grants Commission (UGC) under Section 2 (f) of the UGC Act. The University has been re-accredited with prestigious A+ grade by National Assessment and Accreditation Council (NAAC). The eight constituent institutes, spread across the sprawling lush green 125 acre campus of the University, are Institute of Technology, Institute of Management, Institute of Pharmacy, Institute of Science, Institute of Law, Institute of Architecture and Planning, Institute of Commerce and Institute of Design. The graduate, postgraduate and doctoral level programmes offered by these institutes are rated highly by accreditation agencies, industry, business magazines and students.

Internal Quality Assurance Cell (IQAC)

Nirma University has constituted an Internal Quality Assurance Cell (IQAC) (formerly known as Academic Development and Research Cell) in the year 2008. The prime task of the IQAC is to facilitate and participate in the development of a system for conscious and consistent improvement in the academic and administrative performance of the University. The centre facilitates the constituent institutes to ensure the sustenance of best academic practices; suggests innovative practices; takes new initiatives to remove deficiencies and enhance academic and administrative quality; promotes finest learning-teaching ambience and prepares for accreditation. The IQAC is vibrant and regularly organizes various faculty development programmes in diversified areas which include induction programme, orientation programme, refresher programmes, short term training programmes, etc. and also the training programs for non-teaching staff of the University. The IQAC also undertakes department, institute and university level academic audit to facilitate the efforts of the constituent institutes of the University in leveraging the academic and research standards, conformity to strategic planning and overseeing extension activities for social benefits, etc.

About Institute of Technology

Institute of Technology, Nirma University, started in 1995, was the first self-financed engineering college in Gujarat. Within 25 years of inception, Institute of Technology is a leading hub of education, offering multidisciplinary undergraduate, postgraduate and Ph.D. programmes in engineering. The Institute is ranked within top 25 self-financed engineering colleges of India in the survey conducted by various rating agencies. The faculty members and students of the Institute have won many prestigious awards and bring laurels to the institute.



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Coordinators

Dr. Ruchi Gajjar and Dr. Manish I. Patel

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Internal Quality Assurance Cell, Nirma University

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