

ABOUT THE INSTITUTION

New Horizon College of Engineering (NHCE) is an Autonomous college affiliated to Visvesvaraya Technological University (VTU), approved by All India Council for Technical Education (AICTE) and University Grants Commission (UGC). New Horizon College of Engineering has been accredited by NAAC with 'A' Grade and National Board of Accreditation (NBA). It is an ISO 9001:2008 certified institution.

ABOUT THE DEPARTMENTS

Applied Sciences

The Department of Applied Sciences was started in the year 2001. It serves as the foundation of engineering education by providing students with strong fundamentals in Mathematics, Physics, Chemistry, and other basic sciences. The department plays a vital role in developing analytical thinking, problem-solving abilities, scientific temper, and communication skills that are essential for success in engineering and technology.

Electrical and Electronics Engineering

The department of Electrical and Electronics Engineering is one of the prestigious branches of Engineering and among the oldest departments of NHCE, Bangalore, established in 2001. The department is accredited by NAAC with an 'A' Grade and accredited by NBA. Its vision is to create contemporary engineers, innovators, and entrepreneurs who contribute to building a better nation and a better world.

ABOUT THE EVENT

Artificial Intelligence is transforming Modern Engineering by enabling intelligent systems that can learn, adapt, and make data-driven decisions. However, the success of AI technologies is deeply rooted in strong mathematical principles. This session explores the essential mathematical foundations that power AI-driven engineering solutions, including linear algebra, calculus, probability and statistics, optimisation techniques, differential equations, and numerical methods.

ORGANISING COMMITTEE

Chief Patrons

Dr. Mohan Manghnani

Chairman

New Horizon Educational Institution

Mr. Dharmesh Manghnani

President

New Horizon Educational Institution

Patrons

Dr. Manjunatha

Principal

Dr. R. J. Anandhi

Dean - Academics

Dr. Revathi V

Dean - R&D

Convenor

Dr. Anusuya Devi V S

Professor and HoD - Applied Sciences

Dr. Sujitha S

Professor and HoD - EEE

Coordinators

Dr. Madhumohana Raju A B

Associate Professor - Applied Sciences
94410 35789

Dr. Baskar P

Associate Professor - Applied Sciences
97387 32894

Dr. Mohan Das R

Associate Professor - EEE
97865 84737



NEW HORIZON
COLLEGE OF ENGINEERING



Department of Applied Sciences

Department of Electrical and Electronics Engineering

In association with

Skill Development Centre

Five Day Faculty Development Programme

on

**Mathematical Foundations for
AI-Driven Engineering Applications**

📅 29th June 2026 - 03rd July 2026

Participants will gain insights into how these mathematical concepts are applied in Machine Learning, Deep Learning, Signal Processing, Control Systems, Power Systems, Robotics, Communication Networks, and other Engineering Domains. The programme emphasises the connection between theoretical mathematics and practical AI applications, helping engineers develop a deeper understanding of model development, training algorithms, data analysis, and intelligent decision-making systems.

CO-COORDINATORS

Dr. Padma Priya D D

Senior Assistant Professor - Applied Sciences

Dr. Sudhir Patel

Senior Assistant Professor - Applied Sciences

Dr. Vandana Ahuja

Senior Assistant Professor - Applied Sciences

Dr. B Gunapriya

Professor - EEE

Prof. Sunil S K

Senior Assistant Professor - EEE

Prof. Ramya s

Assistant Professor - EEE



SCHEDULE

Day 1 – 29.06.2026

Inauguration – 10:00 AM - 10:30 AM

Session 1 - 10:30 AM – 12:30 PM

Dr. Mohan Krishna, Supply chain management centre,
Indian Institute of Management Bangalore

Topic: AI for sustainable supply chains - From measurement to action

Session 2 - 2:00 PM – 4:00 PM

Dr. Nagendra J, Associate Professor, Dayananda Sagar College of Engineering

Topic: Pattern recognition and machine learning in Robotics

Day 2 – 30.06.2026

Session 3 - 10:30 AM – 12:30 PM

Dr. Chandra Sekhar Nalamati, Associate Architect,
EV Practice Department, L&T Technology Services, Bangalore

Topic: AI, Data Science, and Optimisation Techniques for Sustainable Engineering

Session 4 - 2:00 PM – 4:00 PM

Jey Kishan, Engineering Officer, CPRI, Bengaluru

Topic: Mathematics for Generative AI, Digital Twins, and Smart Manufacturing

Day 3 – 01.07.2026

Session 5 - 10:30 AM – 12:30 PM

Dr. Bharath, Associate Professor, Dept of AIML, Dr. AIT, Bengaluru

Topic: Artificial Intelligence and Machine Learning for Modern Engineering Applications

Session 6 - 2:00 PM – 4:00 PM

Dr. Ajay Prakash B V, Professor, Dept of AIML, Dr. AIT, Bengaluru

Topic: Hands on AI training tools for Academicians

Day 4 – 02.07.2026

Session 7 - 10:30 AM – 12:30 PM

Dr. Mallikarajana Bandru, Assistant Professor

Department of Mathematics, BMS College of Engineering, Bengaluru
Topic: Deep learning techniques for solving Boundary Value Problems

Session 8 - 2:00 PM – 4:00 PM

Dr. Padmanabhan S, Professor & COE, RNSIT, Bengaluru

Topic: Mathematical Foundations of Artificial Intelligence: Optimisation, Linear Algebra and Neural Networks for Engineering Applications

Day 5 – 03.07.2026

Session 7 - 10:30 AM – 12:30 PM

Dr. Chakravarthula Siva Kumar Raju, Associate Professor,
Department of Mathematics, SR University, Telangana

Topic: Engineering Intelligence: The Mathematics behind AI

ELIGIBILITY

Open to Post Graduate Students, Research Scholars, Faculty Members and Industry Professionals

Registration Link

<https://forms.gle/6AZsQvoVyER8HcVS9>



Note: E – Certificate will be given to the participants who have attended all sessions of the Programme.

Registration Fee

Students / Research Scholars / Faculties / Industry Persons:
Rs. 500

Bank Account Details

Account Name: New Horizon College of Engineering

Account Number: 484700078

Bank: Indian Bank

IFSC Code: IDIB000N112

