

Resource Person: Mr. Arman Ansari, Application Engineer- MathWorks, DesignTech Systems Pvt. Ltd.

5-Day Workshop on AI Techniques for Electrical Technologies using MATLAB

3rd – 7th August 2026 | Department of Electrical Engineering, Central University of Haryana

Organized in collaboration with DesignTech Systems Pvt. Ltd. under IEEE SB at CUH



Prof. Tankeshwar Kumar
Vice-Chancellor



Prof. Pawan Kumar Sharma
Pro Vice-Chancellor



Prof. Suneel Kumar
Registrar



Prof. Vikas Garg
Dean, SOET



Prof. Akash Saxena
HoD, Department of Electrical Engg.
General Chair



Prof. (Dr.) Ajay Kumar Bansal
Department of Electrical Engg
Workshop Convenor



Dr. Kalpana Chauhan
Department of Electrical Engg.
Workshop Coordinator
Branch Counselor, IEEE SB at CUH

Organising Team (Department of Electrical Engineering)

Prof. Rajesh Kumar Dubey, Dr Manish Kumar, Dr. Muralidhar Nayak Bhukya, Dr. Munish Manas, Dr. Sumit Saini

Registration Details

Registration Link:

<https://forms.gle/RLRqrS5hPADfwjGw5>

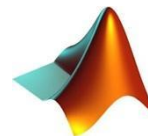
Deadline of Registration: 2nd Aug 2026 or up to 25 Participant (whichever be earlier)

Location: Metro Lab SOET

Time: 10:00 am onwards

Certificates

Certificates will be provided to all session attendees



5 days workshop

on

“AI Techniques for Electrical Technologies using MATLAB”

(3 – 7 August, 2026)



Organized by

IEEE Student Branch and Department of Electrical Engineering
School of Engineering and Technology

Central University of Haryana – Mahendergarh

(Established under the Central Universities Act, 2009 of the Parliament)

'A' Grade University Accredited by NAAC

Central University of Haryana (CUH)

Central University of Haryana is one of the fifteen new Central Universities established by Ministry of Human Resource Development, Government of India (GoI) in XI Five Year Plan (2007-2012) under the Central University Act-2009 of the Parliament. The University has been accredited with 'A' Grade in the first cycle of NAAC assessment and accreditation conducted in March 2017. The University has been listed among the top 150-200 Universities in NIRF ranking. The University is fully funded by the University Grants Commission (UGC). Permanent Campus of the University is situated in 484 acres of land at Jant-Pali Villages, Mahendergarh district of Haryana from where CUH is running its academic operations. Presently the University offers 83 academic programmes (UG/PG/Research). The university is making special efforts for the education of the students as well as for skill development and placement. For this, the facility of Training and Placement Centre has also been developed in Gurugram. CUH is moving ahead keeping the goal of all round development of the students at the centre. The University is engaged in research, research-innovation, skill development as well as developing opportunities for employment generation. The University is striving to develop necessary modern facilities for the students in the field of higher education. In the direction of successful implementation of National Education Policy-2020, the university is moving ahead in a planned manner and for skill development and employment generation of the students, the university is working at the micro level through special training and placement centres. CUH is moving towards realizing the dream of Self-reliant India, Saksham Bharat & Strong India as shown by Prime Minister Shri Narendra Modi

To know more about the university please visit: www.cuh.ac.in

School of Engineering and Technology (SoET):

The School of Engineering & Technology at the Central University of Haryana, Mahendergarh focus on the rapid development of high-technology academic programs. Offering various undergraduate and research courses the School of Engineering and Technology came into existence in 2016, with a clear mandate to address the issues pertaining to continuous and extensive education requirements in the country.

The school is a home to Computer Science and Engineering, Civil Engineering, Electrical Engineering and Printing and Packaging Technology programs. Through innovative partnerships with area specific companies, the school helps students gain practical work experience and constantly grooms itself to meet continually changing industry needs.

Visit the school online at: <https://www.cuh.ac.in/soet.aspx>

About the workshop:

The proposed workshop is designed to introduce students, research scholars, and faculty members to Artificial Intelligence (AI), Machine Learning (ML), and Deep Learning (DL) techniques using MATLAB R2026a. The sessions will cover MATLAB fundamentals, data handling, visualization, machine learning using classification and regression techniques, and deep learning applications with practical demonstrations. Hands-on activities will include the Classification Learner App, Regression Learner App for Battery State of Charge (SOC) estimation, image classification, transfer learning, and neural network-based SOC estimation in Simulink. It also aligns with the University's vision of promoting skill development, industry-relevant education, and multidisciplinary research.

Objective of the workshop:

- To demonstrate AI applications in electrical engineering.
- To enhance practical skills using MATLAB.
- To encourage research and innovation in emerging intelligent electrical technologies

Target Participants:

- Faculty members and students from Electrical, Electronics, Mechanical, Computer
- Industry professionals and research scholars working in AI.

Registration:

- No Registration Fee
- Registration will be done on First Come First Serve bases.
- Register online using the link below:
<https://forms.gle/zoMP5kxm8xmDTwyF7>
- Deadline of Registration: 02th Aug 2026 or up to 25 Participant (whichever be earlier)

Venue:

- First two Days (3 and 4 August, 2026)- Offline (Metro Lab, SoET)
- Remaining 3 days (5 to 7 August, 2026)- Online

Contact Us:

FDP – Workshop Secretariat,
School of Engineering and Technology,
Central University of Haryana,
Jant-Pali, Mahendergarh, Haryana.

Email: ajaybansal@cuh.ac.in, kalpanachr@cuh.ac.in

Programme Schedule

Offline Mode [03-08-2026 to 04-08-2026]		
Day	Sessions	Topics
Day 1 (3/08/2026)	Session 1	MATLAB Fundamental useful for AI Overview of MATLAB R2026a – New Features Why AI for Electrical Engineering? MATLAB ecosystem for AI and data analytics MATLAB Functions Arrays, Vectors & Matrices Matrix Operation Importing Excel/CSV datasets Plotting & Visualization
	Session 2	Machine Learning using Classification Techniques Introduction to AI/ML using MATLAB. Types of Machine Learning: Supervised and Unsupervised Overview of Classification Learning Algorithms Workflow for Building Classification Models Hands-on with the Classification Learner App
Day 2 (04/08/2026)	Session 1	Machine Learning using Regression Techniques Overview of Regression Learning Algorithms Workflow for Building and Comparing Regression Models Performance Evaluation of Regression Models Hands-on: Battery State of Charge (SOC) Estimation using the Regression Learner App
	Session 2	Deep Learning using MATLAB Overview of Neural Networks & Deep Learning Image Classification with Deep Learning Transfer Learning with Pre-Trained Networks Demo: Battery State of Charge Estimation in Simulink Using Feedforward Neural Network Q/A & Learning Resources
Online Mode [05-08-2026 to 07-08-2026]		
On-Ramp Sessions, Assignments		

ORGANISING COMMITTEE

CHIEF PATRON

Prof. Tankeshwar Kumar

Vice-Chancellor, Central University of Haryana, Mahendergarh

PATRON

Prof. Pawan Kumar Sharma

Vice-Chancellor, Central University of Haryana, Mahendergarh

GENERAL CHAIR

Prof. Akash Saxena

HOD and Professor, Department of Electrical Engineering,

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ORGANISING COMMITTEE

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Dr. Munish Manas, Assistant Professor, Electrical Engg., SoET

Dr. Manish Kumar, Assistant Professor, Electrical Engg., SoET

Dr. Sumit, Assistant Professor, Electrical Engg., SoET

Dr. Murlidhar Nayak, Assistant Professor, Electrical Engg., SoET