

About the Institute

Punjab Engineering College (PEC), originally established as Mugalpura Engineering College in 1921 in Lahore, later relocated to its present campus in 1953 and became affiliated with Panjab University. It attained Deemed University status in 2003, was renamed PEC University of Technology in 2009, and reverted to its original name, Punjab Engineering College (Deemed to be University), in 2017. Administered by the Union Territory of Chandigarh, Government of India, it shares its 146-acre campus with Chandigarh College of Architecture and follows academic and administrative processes similar to IITs in India.

PEC offers 8 undergraduate B.Tech programmes and 13 postgraduate M.Tech programmes across various engineering and technology disciplines. Since obtaining university status, PEC has introduced Ph.D. programs spanning engineering, science, management, humanities, and social sciences. Admissions to UG and PG programs are based on national-level examinations, specifically JEE (Mains) and GATE, respectively.

About the Department

The globalization of the Indian economy has created significant opportunities for the computer software and hardware industry. The Department of Computer Science and Engineering at PEC plays a pivotal role in producing highly skilled software engineers. The department focuses on fostering innovation and providing a comprehensive education to excel in the growing software sector. Experienced faculty members deliver a rigorous curriculum, emphasizing hands-on training and personal development. The programs are designed for close industry interaction, reflected in the high demand for department graduates. Alumni from the department have found success in companies like MICROSOFT and SEAGATE in the US. The continuous development of the curriculum and close ties with the industry ensure that students are well-prepared for the dynamic challenges of the software and hardware sector.



Patron

Dr. Baldev Setia
Director, PEC

Chairman

Dr. Trilok Chand
Professor and Head, CSE, PEC

Coordinator

Dr. Padmavati, Associate Professor,
CSE, PEC
Email: padmavati@pec.edu.in
Contact No: 9417689170 (M), 01722753856 (O)

Co-Coordinator

Dr. Sudesh Rani, Assistant Professor,
CSE, PEC
Email: sudeshrani@pec.edu.in
Contact No: 9876860085

AICTE Training and Learning (ATAL) Academy sponsored



6 Days

Faculty Development Programme
(FDP) on

**Deep Learning: Fundamentals and
case studies in Healthcare**
(Physical Mode)

08.01.2024 to 13.01.2024

Coordinator

Dr. Padmavati
Associate Professor, CSE

Co-Coordinator

Dr. Sudesh Rani
Assistant Professor, CSE



Organized by

Dept. of Computer Science and Engineering
Punjab Engineering College
(Deemed to be University), Chandigarh – 160012

Phone: 0172 2746074, 2753051

Website: www.pec.ac.in

About ATAL Academy

The AICTE Training And Learning (ATAL) Academy, established by the All India Council for Technical Education (AICTE), is a specialized institution dedicated to enhancing the knowledge and skills of faculty members, research scholars, and students in the field of technical education. ATAL Academy offers a wide range of faculty development programs in various contemporary technology areas. These programs are designed to keep educators and learners updated with the latest advancements in technology and to foster innovation and research in technical education. The academy conducts numerous programs in collaboration with government institutions, benefiting a significant number of participants each year. It plays a pivotal role in elevating the quality of technical education and research in India by providing access to cutting-edge knowledge, resources, and expertise. ATAL Academy is a valuable resource for those seeking to stay at the forefront of technological advancements and contribute to the growth and excellence of technical education in the country.

Objective of FDP

The Faculty Development Programme is designed to offer participants an extensive overview of deep learning fundamentals, tools and techniques that are critical in solving problems in deep learning domains. This course is tailored to provide an insight into the latest research trends in healthcare applications using deep learning techniques. Participants will be exposed to a wide spectrum of topics, encompassing the multiclass classification of Parkinson's disease, Cancer cell classification, the categorization of mandibular fractures based on radiograph images, the detection of schizophrenia through MRI analysis, predictive analytics for epileptic seizures, and more. The participants will also have a wider perspective to security and privacy issues in healthcare applications. The Faculty Development Programme offers an invaluable opportunity for participants to expand their

horizons and contribute to the cutting-edge advancements in healthcare and deep learning.

Topics Covered but not limited to:

The major topics to be covered (though not limited to) are as follows:

- Fundamentals of Deep Learning
- Current research trends in deep learning
- Data pre-processing techniques
- Epileptic seizure prediction and detection
- Classification of various disease such as, Parkinson's, cancer etc. using deep learning
- Applications of deep learning in dentistry
- Detection of autism disorder using deep learning
- Voice disorder detection using deep learning
- Identification of disease such as cancer, Schizophrenia etc. using deep learning.
- Security and privacy issues in healthcare applications
- Hands-on lab sessions on various case studies

Resource Persons

Resource persons are from reputed institutes, software industries and R & D organizations. Some key speakers are:

Dr. Trilok Chand Aseri, PEC
Dr. Rajesh Bhatia, PEC
Dr. Satish Kumar, Chief Scientist, CSIO, Chandigarh
Dr. Sateesh K Peddoju, IIT Roorkee
Dr. Sudarshan Iyengar, IIT Ropar
Dr. Neelesh Kumar, Sr. Principal Scientist, CSIO, Chandigarh
Dr. Banumathy Nagamani, PGIMER, Chandigarh
Dr. Manoj Jaiswal, PGIMER, Chandigarh
Dr. Neelam Goel, UIET, Panjab Univeristy
Dr. Tanu Wadhera, IIIT Una
Mr. Rahul Sharma, Microsoft Pvt. Ltd
Dr. Ashima Khosla, CDAC
Dr. Jinee, TIET Patiala

Who should Attend

The faculty members of the AICTE approved institutions, research scholars (PhD. and PG students), participants from Government and industry etc.

There is no Registration fee from any participant (Max. 100 participants). The participants will be selected on first come, first serve basis. Further, Certificate will be provided to the participant after successful completion of the training program with at least 80% attendance and Continuous Comprehensive Assessment.

How to Apply

Login to AICTE ATAL Portal and register as participant by visiting: <https://atalacademy.aicte-india.org>. After registering as participant, choose this program from the list of workshops.

Organizing Committee

Dr. Rupali Syal, CSE
Prof. Alka Jindal, CSE
Dr. Poonam Saini, CSE
Dr. Sandeep Harit, CSE
Dr. Shilpa, CSE
Prof. Mayank Gupta, CSE
Prof. Amandeep Kaur, CSE
Dr. Manish Kumar, CSE
Dr. Satnam Kaur, CSE
Dr. Kanu Goel, CSE
Dr. Nitin Kumar, CSE

Contact Details

For any queries regarding this programme,
Please contact:

The Coordinators, ATAL FDP
Department of Computer Science and Engineering,
Punjab Engineering College (Deemed to be
University) Chandigarh – 160012 INDIA
Email: padmavati@pec.edu.in, sudeshrani@pec.edu.in
Ph: +91 9417689170, +91 9876860085