AMITY UNIVERSITY JAIPUR

ACCREDITED WITH GRADE A+ NAAC

Amity School of Engineering and Technology

in association with
Association of Indian Universities,
Amity University Rajasthan
Academic and Administrative Development Centre
(AIU-AUR-AADC)

ORGANISE

FACULTY DEVELOPMENT PROGRAM (FDP) ON

RESEARCH AND DEVELOPMENT INSIGHTS INTO MACHINE LEARNING, DEEP LEARNING, AND NEURAL NETWORKS

05-09 May, 2025 I 1:30 P.M. to 4:30 P.M. I Moot Court, D- Block, IIIrd Floor

TO PARTICIPATE
SCAN THE QR CODE

ABOUT AIU

Association of Indian Universities (AIU) is an apex inter university representative body of universities and other higher education institutions in the country. Established in 1925 as the Inter University Board (IUB) of India, it acquired its legal status as a registered society in 1967 under the Societies Registration Act 1860 and was rechristened as Association of Indian Universities (AIU) in 1973. AIU is the second oldest university association in the world next to the Association of Commonwealth Universities which was established in 1913. It has the distinct feature of having the largest network of universities and other HEIs under its ambit with 921 members in India Including 14 foreign universities who are the Associated members. The membership of AIU includes all types of universities e.g., Conventional Universities, Open Universities, deemed to be Universities, State Universities, Central Universities, Private Universities and Institutes of National Importance. In addition to Indian Universities, Universities/Institutes from Bangladesh, Bhutan, Republic of Kazakhstan, Malaysia, Mauritius, Nepal, Thailand, United Arab Emirates and United Kingdom are its Associate Members. Since its inception AIU has played a very significant role in the development of Higher Education in the Country. Some of the eminent scholars and visionary leaders like Dr Sarvepalli Radhakrishnan, Dr Shyama Prasad Mukherjee, Dr Zakir Hussain, Sir A L. Mudaliar have given leadership to AIU. During such a long journey, AIU has carved a niche for itself by serving the Ministry of Education, Govt of India as a research-based policy advisory body.

Being an apex institution, it constitutes an integral part of all major decision-making committees and commissions in the country. As an academic 'think tank' organization, AIU supports the Government as research-based policy advisory body with the wider mandate of taking up research projects on higher education policy, capacity building. t also acts as a bureau of information on higher   education; liaise with international bodies and universities for internationalization of Indian higher education among many others.

VISION OF AIU

The Vision of AIU is to emerge as a dynamic service and apex advisory organization in India by undertaking such initiatives and programs which could strengthen and popularize Indian higher education as leading-edge system in the world and promote greater national and international collaboration in Higher Education, Research, Extension, Sports, Youth and Cultural Activities. It is bestowed with the mission of promoting and representing the Indian Universities and other higher education institutions through strong liaison with the government and National/International organizations, sister associations world over and establish liaison between/among universities through active support, cooperation and coordination among the member universities and all its stakeholders for quality education, research and other academics and extension activities.

ABOUT AADC

AIU has established AIU Academic and Administrative Development Centre in 10 different Universities. The aim of establishing these Centers is to organize short-term professional development programs for the faculty members and training programs for the administrative functionaries of the member universities especially on the use of technology and adopting blended learning methods of teaching. AIU-AADC will offer short-term programs of varying duration aimed at continuous capacity building of the key stakeholders through online and in physical modes.

OBJECTIVES OF AADC

Provide Continuous knowledge and skill acquisition and enhancement for faculty in order to contribute effectively to the changing landscape of higher education. Train administrative staff in higher education institutions with appropriate skills to adapt to emerging information technologies Prepare library professionals and other technical staff in HEIs to contribute to knowledge cum learning and research resources as per the global demands and the local needs. Introduce research scholars to the principles of academic integrity and professional ethics.

ABOUT AUR

Established by Amity University Rajasthan Act 2008, notified by, the university offers education in various streams as per global standards. AUR stands with a baton to illuminate and guide the aspirants of all educational streams. It imparts knowledge in various domains for professional as well as sustainable development grooming students to become better global leaders with strong ethical values and integrity.

With a vision to be a global university and provide value-based contemporary education with a thrust on innovation, research and productivity blended with modernity and tradition, AUR is marching towards the pinnacle of academic excellence and success.
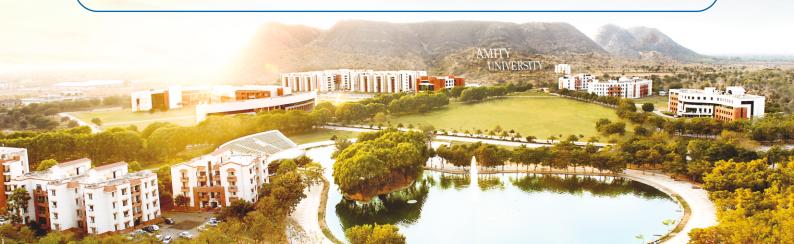
Taking up the challenges of the present global education era, AUR holds a mission to prepare future global leaders by providing an environment of excellence in academics, research, Technology driven and field-based learning, cross cultural exposure, holistic development and also enabling them with a commitment to social and environmental responsibility. AUR is an institution providing higher education par excellence.

- Rated Gold by 'The Leed Green Building Rating System' established by 'The US Green Building Council and verified by Green Business Certification INC'. (2017)
- The Week Hansa Research Best University Survey ranked AUR 6th among the Private Universities of India (2014)
- Brands Academy Excellence Award has crowned AUR with the 'Best Private University in North India' (2014)
- ASSOCHAM awarded AUR for 'Best University Campus' (2014)
- World Education Summit honored AUR for excelling in Digital Learning and awarded the University with the title of 'Best North India Private University' (2014)

- Hindustan Times appreciated AUR's Excellence in Employability and Placement (2013)
- Silicon India ranked AUR 2nd in its survey of Top 20 Indian Private Universities in India (2013)
- According to Times Higher Education AUR is awarded World university Ranking between 1001 to 1200 rank Band (2025)
- QS Asia Ranking in the rank band of 851-900 for the year 2024-25.
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ABOUT THE PROGRAM

This program aims to provide information about, Machine Learning (ML), Deep Learning (DL) and Neural Networks (NN). Machine learning is the scientific study of algorithms and statistical models that computer systems use to perform a specific task without using explicit instructions, relying on patterns and inference instead. Deep learning is part of a broader family of machine learning methods based on learning data representations, as opposed to task-specific algorithms. This FDP provides an opportunity to the faculty and industry personnel towards to learn the advanced concepts of machine learning, deep learning and Neural Networks. The program will emphasize both theoretical concepts and practical experience through hands-on projects addressing real-world problems. It facilitates gaining of insight into several unsupervised important topics associated with ML, DL, NN.

PATRONS

Dr. Ashok Chauhan
Founder President, AEG

Dr. Aseem Chauhan
Chancellor, AUR

Prof. (Dr.). Amit Jain
Vice Chancellor, AUR

Prof. (Dr.) G. K. Aseri
Pro Vice Chancellor,
Director-IQAC, AUR

CORE TEAM

**Prof. (Dr.) Bhupesh
Kumar Singh**
Dy. Director-ASET, AUR

Mr. Akshat Shrivastava
Director HR, AUR,
Coordinator AIU-AUR-AADC,
Coordinator Amity Academic
Staff College, AUR

Prof. (Dr.) Sunil Pathak
Head, Department of
Computer Science &
Engineering, ASET, AUR

SCHEDULE FOR 5 DAYS

DAY-1   5th May 2025

12:30-12:35 PM	Welcome and About the FDP	Prof. (Dr.) Bhupesh Kumar Singh Dy. Director-ASET, AUR
12:35-12:45 PM	About AUR	Prof. (Dr.) G. K. Aseri Pro Vice Chancellor, Director-IQAC, AUR
12:45-01:00 PM	Opening Remarks and welcome address	Prof. (Dr.). Amit Jain Vice Chancellor, AUR
Duration	**Session Resource Person**	
01:00 to 2:30 PM	Research Problems in Machine Learning and Deep Learning , Research Methodologies and Publications	Prof. G. R. Sinha, Vice Chancellor, GSFC University, Ex-Professor, IIIT Bangalore, India.
Tea Break	**2:30 PM to 3:00 PM**	
03:00 to 4:30 PM	Conceptual Understanding of Machine Learning and Deep Learning	Dr. Sonal Amit Jain , Professor, PG Department of Computer Science and Technology, Sardar Patel University, Vallabh Vidyanagar, 388120 Gujarat, India.

DAY-2   6th May 2025

Duration	**Session Resource Person**	
01:00 to 2:30 PM	Case Studies: Social Media Analysis, Weather Forecasting, Object Detection, Sentiment Analysis,Natural Language Processing, Cross Modal Data Analysis	Mr. Shaleen Taneja, Principal, Generative AI, IBM, Gurugram, Haryana, India
Tea Break	**2:30 PM to 3:00 PM**	
03:00 to 4:30 PM	Deep Learning Task, Feature & Model, Convolutional Neural Network Mulaye,	Mr. Pranav Data Analyst Findability Sciences, Mumbai, India.

DAY-3   7th May 2025

Duration	**Session Resource Person**	
01:00 to 2:30 PM	Backpropagation Algorithm, Linear Regression and Logistic Regression	Dr. Mukesh Gupta, Scientist-F, NIC, New Delhi, India.
Tea Break	**2:30 PM to 3:00 PM**	
03:00 to 4:30 PM	Supervised, Unsupervised, Reinforcement, Multiclass in Big Data Analytics	Prof. Manju Khari, Professor, School of Computer & Systems Sciences, JNU New Delhi, India.

SCHEDULE FOR 5 DAYS

DAY-4   8th May 2025

Duration	Session	Resource Person
01:00 to 2:30 PM	Practical Applications, Industry Use Cases and Hand on with TensorFlow and Numpy	Dr. Taranpreet Singh Ruprah Department of Computer Science and Engineering, Amity University Rajasthan, Jaipur, India.
Tea Break	**2:30 PM to 3:00 PM**	
03:00 to 4:30 PM	Ethical, Responsible and Humane use of AI with a Special Reference to LLMs	Prof. (Dr.) D. P. Sharma, Professor, UNDP, DB2 &WSAD-IBM USA, FFSFE-Germany.

DAY-5   9th May 2025

Duration	Session Resource Person	
01:00 to 2:30 PM	Regression, Neural Network and Deep Learning application in Big Data Analytics.	Prof. (Dr.) Amit Kumar Sinhal, JK Lakshmipat University, Jaipur, India.
02:45 PM onwards	Conclusion and Closing Ceremony	Prof (Dr.) Amit Jain, Vice Chancellor, Amity University Rajasthan, Jaipur, India.
Tea Break	**4:00 PM onwards**	

PROGRAM OBJECTIVES

- To provide a strong foundation in the principles and algorithms of Machine Learning, Deep Learning and Neural Networks.
- To explore current trends, advancements, and research breakthroughs in AI and data-driven technologies.
- To develop the ability to design, implement, and evaluate intelligent systems using state-of-the-art ML, DL models.
- To promote hands-on learning through real-world datasets, tools, and frameworks used in research and industry.
- To enable participants to critically analyze and contribute to scholarly research, publications, and innovative projects.
- To foster interdisciplinary applications of AI across domains such as healthcare, agriculture, cybersecurity, finance, and smart systems.
- To cultivate ethical awareness, responsible AI practices, and sustainable research methodologies.
- To prepare learners for advanced studies, research roles, or industry positions involving AI and deep technology solutions.