#### **About BIET Lucknow**

Established in the year 2008 under the guidance of Sri. G. S. Agrawal founder of the Bansal Educational Trust with the approval of All India Council of Technical Education. New Delhi and affiliated to Dr. A. P. J. Abdul Kalam Technical University Lucknow for undergraduate courses of engineering and post graduate course of business administration and engineering. Ever since its establishment in the year 2008 there has been no looking back for the Bansal Institute of Engineering & Technology. It has grown many folds year after year on variety of dimensions may it be in reference to educational standards. number of students intake or in reference to number of placements being offered to the students. We have grown to 2293 students in 10 years which in itself is sign of our growth and commitment towards maintaining educational standards.

#### **Department** of Information Technology

The Department of Information Technology offers B.Tech. Programme at undergraduate level since 2008 to impart quality education and to produce innovative and globally competent technocrats having sound knowledge in the fields of Computer hardware and software. The Department offers a four-year undergraduate degree Programme in Information Technology with an annual intake of 60 students. The programme is affiliated to Dr. API Abdul Kalam Technical University (AKTU), Lucknow (Formerly Uttar Pradesh Technical

## University).

The well qualified faculty members hold degrees from premier institutions and are always ready to help and guide students out of the way. Some of the major research areas which the faculty members and students working on are Computer Networks. Database Systems, Multimedia, Image Processing, Software Engineering, Computer Architecture. Information System Security -Security and Data Mining. The Department provides state of the art computing facilities to the students with WI-FI campus and high Internet access speed and also have well establish lab with R & D facilities. It promotes active industry-institute collaboration by identifying areas of interest and has various academic alliances with different-different companies.

#### **About FDP**

BIET, Lucknow is pleased to announce the one-week online FDP on "**Cloud Services, AI, ML and Applications**" from **July 24 - 29, 2023**. FDP will have twelve expert sessions conducted by speakers from Academia as well as Industry from IIT, NIT, REC and Multi-National Companies.

Topics to be covered in the Program

See Annexure I



# ONE WEEK ONLINE FDP on Cloud Services, AI, ML and Applications

July 24 - 29, 2023



Organized By Department of Information Technology Bansal Institute of Engineering & Technology Lucknow - India (AICTE Approved & Affiliated by AKTU) College Code-422

#### In association with

Computer Society of India Lucknow Chapter

#### Who Can Apply

- 1. The faculty members of the approved institutions by AICTE.
- 2. Research scholars and PG Scholars
- 3. Participants from Government, Industry (Bureaucrats/ Technicians/ Participants from Industry etc.)
- 4. Staffs (for CIT only).

# **Selection Process**

Selection of candidates will on first-cum-firstserve basis and no. of seats are limited. (Not more than 15% from Host Institution).

**Registration (Registration Fee INR 100)** 

- 1. For registration of the programme: <u>https://forms.gle/xLWCWwC4o52FCmc7A</u> Fill in all necessary details
- 2. Join WhatsApp group for any queries: https://chat.whatsapp.com/CudRUAfXGit 7amYfqIHqZN

#### Mode of the FDP

All expert sessions will take place through **online platform Google Meet app**.

#### **Issuance of certificate**

The certificates shall be issued to those participants who have attended the program with minimum 80% of attendance and scored minimum 60% marks in the test (online mode) at the end of the program.

#### **Address for Correspondence**

Dr. C. L. P. Gupta Professor, Dept. of IT Dean Academics Bansal Institute of Engineering & Technology NH-24, Sitapur Road, Behind Sewa Hospital, Lucknow, Uttar Pradesh, India PIN-226201 M: 9236005032 Email: clpgupta@gmail.com

### **Advisory Committee**

Prof. R. B. Mishra, CS&E, NIT, PATNA, India Dr. Rajeev Mishra, IIT, Patna Dr. Himanshu Misra, IIT Mandi Prof. Divakar Singh Yadav, CSE, IET Lucknow India Prof. Subodh Wariya, ECED, IET Lucknow India Dr. Shailendra Kumar, MANIT Bhopal Dr. Kumar Anubhav Tiwari, Wartsilla, Finland Mr. Shashank Agrawal, RM, Coinbase, USA Dr. Siddharth Chaurasia- Sr. Scientist AI & ML, TCS Mr. Neeraj Kumar - Technology Head, Microsoft Business Unit, TCS **Chief Patron Prof. J.P. Pandey Hon'ble Vice Chancellor** Dr. APJ AKTU, Lucknow

#### **Patron**

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#### Organizing Secretary Mr. Abhishek Kumar Saxena HOD-IT

#### **Organizing Committee**

Mr. Madan Kushwaha Mr. Pragyadeep Ms Dakshita Joshi Mr. Vivek Singh Mr. Yogendra Tripathi Ms Zainab Khan Ms Reshu Singh

Department of Information Technology Bansal Institute of Engineering & Technology, Lucknow One Week Online FDP on Cloud Services, AI, ML and Applications (24 – 29 July, 2023) <u>FDP Schedule</u>					
Day	10:30 AM-12:15 PM	12:15 PM- 02:00 PM	02:00 PM-3:45 PM		
24-07-2023 (Monday)	S-1: Introduction of Cloud Services, AI, ML and Applications/Scope (Dr. Sudhakar Tripathi, Associate Professor & Head ITD REC Ambedkarnagar) 12:00-12:15PM- Q & A	LUNCH BREAK	S-2: Cloud Concepts (Mr. Neeraj Kumar - Technology Head, Microsoft Business Unit, TCS) 03:30-03:45PM- Q & A		
25-07-2023 (Tuesday)	S-3: Resource Management in Cloud using Azure (Mr. Neeraj Kumar - Technology Head, Microsoft Business Unit, TCS) 12:00-12:15PM- Q & A		S-4: Governance and Compliance using Identity, Access and Security (Mr. Neeraj Kumar - Technology Head, Microsoft Business Unit, TCS) 03:30-03:45PM- Q & A		
26-07-2023 (Wednesday)	S-5: Managing and Deploying Resources in Azure (Mr. Neeraj Kumar - Technology Head, Microsoft Business Unit, TCS) 12:00-12:15PM- Q & A		S-6: Scope of AI, ML in Research and Industrial Applications (Prof. R. B. Mishra, Professor, CSED NIT Patna, Ex IITBHU) 03:30-03:45PM- Q & A		
27-07-2023 (Thursday)	S-7: AI and Machine Learning (Dr. Siddharth Chaurasia- Sr. Scientist – AI & ML, TCS) 12:00-12:15PM- Q & A		S-8: Optimization Techniques and Applications (Dr. Anand Bihari, Asstt Prof. SCSE VIT Univ. Vellore) 03:30-03:45PM- Q & A		
28-07-2023 (Friday)	S-9: Azure Machine Learning (Dr. Siddharth Chaurasia- Sr. Scientist – AI & ML, TCS) 12:00-12:15PM- Q & A		S-10: Train your own Model (Low code) on Azure (Dr. Siddharth Chaurasia- Sr. Scientist – AI & ML, TCS) 03:30-03:45PM- Q & A		
29-07-2023 (Saturday)	S-11: Use model for inferencing by deploying as a Service (Dr. Siddharth Chaurasia- Sr. Scientist – AI & ML, TCS) 12:00-12:15PM- Q & A		S-12: Time Series Data Forecasting & Analysis (Dr. Sanjay Agrawal, Asstt Prof. EED REC Ambedkarnagar) 03:30-03:45PM- Q & A		

# **Annexure I** *Topics to be covered in the Program*

S-1: Introduction of Cloud Services, AI, ML and Applications/Scope	S-4: Governance and Compliance using Identity, Access and Security	S-8: Optimization Techniques and Applications
<ul> <li>S-2: Cloud Concepts</li> <li>1. Understanding the Cloud Concepts <ul> <li>a. Introduction to cloud computing</li> <li>b. What is Cloud Computing?</li> <li>c. Benefits of using Cloud Services</li> <li>d. Cloud service providers and their types</li> <li>e. Understanding the basics of Cloud</li> </ul> </li> </ul>	<ul> <li>i. Azure Active Directory</li> <li>ii. Privileged Identity Management</li> <li>iii. Understanding Managed Identities</li> <li>iv. Security in Azure (MS Defender for Cloud, Azure Monitor, Azure Sentinel, and Log Analytics)</li> <li>v. Monitoring Platform</li> </ul>	<ul> <li>S-9: Azure Machine Learning         <ul> <li>a. Azure ML – Platform Introduction</li> <li>b. AutoML</li> <li>c. Designer Studio</li> </ul> </li> <li>S-10: Train your own Model (Low code) on Azure         <ul> <li>a. Understand your Data</li> <li>b. Model Training using</li> </ul> </li> </ul>
Services platform f. Core Architectural components of Microsoft Azure	Service Health S-5: Managing and Deploying Resources in Azure	Designer/studio S-11: Use model for inferencing by deploying a
<ul> <li>S-3: Resource Management in Cloud using Azure</li> <li>a. Understanding Tenants and subscriptions</li> <li>b. Azure Compute and Networking</li> </ul>	<ul> <li>i. What are Arm Templates?</li> <li>ii. Creating and Deploying ARM Templates with parameters</li> <li>a. Azure Data Factory – Data Ingestion</li> </ul>	Service a. Model Training continued b. Deployment of model as webservice
services concepts i. Deploying virtual networks, virtual machines, etc. ii. Networking Basics iii. Deploying services in Azure	S-6: Scope of AI, ML in Research and Industrial Applications	S-12: Time Series Data Forecasting & Analysis
<ul> <li>c. Storage service in Microsoft Azure</li> <li>iv. Understanding Blobs, queues, files</li> <li>v. Understanding Azure SQL, SQL Servers, and Databases</li> <li>vi. Familiarity with Data Lake</li> </ul>	<ul> <li>S-7: Al and Machine Learning         <ul> <li>a. Introduction to Al and Machine Learning</li> <li>b. ML Algorithms – Classification, Regression and Clustering</li> <li>c. Use cases for ML in Industry</li> </ul> </li> </ul>	*Q & A session in all Topics included