





Department of Computer Applications in collaboration with



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presents

One Week FDP

on

Mastering Data Analytics: From Fundamentals to Advanced Techniques with Real World Applications

6th-10th January, 2025 Timings: 1:30 PM to 4:30 PM

Maharaja Agrasen Institute of Management Studies

(A unit of Maharaja Agrasen Technical Education Society) Affiliated to GGSIP University; NAAC 'A++' grade accredited; Autonomous status from UGC; Recognized u/s 2(f) of UGC Recognized by Bar Council of India; ISO 9001:2015 Certified Institution Maharaja Agrasen Chowk, Sector-22, Rohini, Delhi-110086, India Phone Office: 8448186947, 8448186950 Website:<u>www.maims.ac</u>.in



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Ms. Neetu Agarwal (Assistant Professor, Department of Computer Applications)

Mr. Aashish (Assistant Professor, Department of Computer Applications)

Maharaja Agrasen Institute of Management Studies

Maharaja Agrasen Institute of Management Studies (MAIMS) is a premier educational institution committed to empowering youth with a value-based education that inspires change and fosters growth. Guided by the ethos of Vasudhaiva Kutumbakam (The World is One Family), MAIMS emphasizes proactive learning, creativity, and entrepreneurship to prepare students for the challenges of a rapidly evolving world.

Our strong collaborations with industry and leading corporate houses provide students with exceptional training and internship opportunities, enabling them to excel in their careers. This commitment to excellence is reflected in our consistently high placement records. At MAIMS, we nurture a spirit of innovation, global competence, and national development while instilling sensitivity towards the community and environment. We strive to inspire dreams, galvanize actions, and create visionary leaders ready to shape a better tomorrow.

Department of Computer Applications

Established in 2024, the Department of Computer Applications is dedicated to preparing students for dynamic careers in the ever-evolving field of computer science and applications. Offering a comprehensive Bachelor of Computer Applications (BCA) program, we blend theoretical knowledge with practical skills in areas like programming, software development, web technologies, database management, and cybersecurity. Equipped with state-of-the-art labs and guided by expert faculty, students benefit from experiential learning that fosters critical thinking, innovation, and problemsolving abilities.

Beyond academics, we emphasize holistic development through internships, research projects, and co-curricular activities, maintaining strong industry collaborations to align with current technological trends. Our graduates are empowered to pursue diverse careers, from software engineering to IT consulting and entrepreneurship, driving innovation and societal impact in the fast-paced world of computing.

About the Faculty Development Program

The Faculty Development Programme (FDP) on "Mastering Data Analytics: From Fundamentals to Advanced Techniques with Real-World Applications," scheduled from January 6th to 10th, 2025, at Maharaja Agrasen Institute, is designed to provide a holistic understanding of data analytics by integrating foundational concepts with advanced techniques.

Participants will gain expertise through hands-on sessions using real-world datasets and cuttingedge tools like Excel, Power BI, Orange, IBM Watson, and SPSS Cognos. This will cover essential topics such as statistical analysis using Excel, advanced functions like regression analysis, hypothesis testing, and time series analysis, along with data visualization using Power BI, including report creation, dynamic dashboards.

It will also delve into advanced Power BI applications for research, machine learning fundamentals, model evaluation metrics, and generative AI concepts, with practical exposure to building and evaluating ML models. This aims to equip educators and professionals with the skills to enhance teaching, research, and professional practices in data analytics.

Objectives of FDP

- To provide in-depth knowledge and practical expertise in statistical analysis, data visualization, machine learning, and generative Al using cutting-edge tools like Excel, Power Bl, Orange, and IBM Watson.
- To enable participants to apply analytical techniques to solve real-world problems through hands-on sessions with real datasets, fostering a deeper understanding of data-driven decision-making.
- To enhance the teaching methodologies of participants by integrating data analytics tools and techniques into their curriculum, enabling them to deliver more impactful and practical learning experiences.

Who should Attend?

- Educators and Academicians: Professors, lecturers, and teaching professionals seeking to integrate advanced data analytics into their curriculum and enhance their teaching methodologies.
- Researchers: Individuals involved in academic or industrial research who want to leverage data analytics and AI tools for innovative research projects and datadriven insights.
- Industry Professionals: Practitioners looking to upskill in data analytics, visualization, and AI to stay competitive and apply these skills to real-world scenarios.
- Postgraduate Students and Scholars: Aspiring learners aiming to deepen their understanding of data analytics and prepare for advanced career opportunities in data-driven fields.

Day Wise Schedule

| Day | Topics | Higlights |
|------------------------------|--|---|
| Day-1 (6th January 2025) | Statistics Using Excel | Introduction to statistics: Mean, median, mode, standard deviation, variance Advanced Excel functions (CORREL, T TEST) Regression analysis and hypothesis testing Hands-on session with real datasets |
| Day-2 (07th January 2025) | Data Visualization with Power Bl | Overview of Power BI and connecting to data sources Creating reports and interactive dashboards Customizing visualizations using DAX Practical exercises with real data |
| Day-3 (08th January 2025) | Power BI – Advanced Applications and Research | Applying advanced features for solving real-world problems Research-oriented project development using Power Bl |
| Day-4 (9th January 2025) | Machine Learning and Generative Al | Introduction to Orange for ML model building Overview of ML algorithms and evaluation metrics Generative AI with Large Language Models (LLMs) Hands-on session for building and evaluating ML models |
| Day-5 (10th January 2025) | Al and Data Visualization Using IBM Tools | - Using SPSS Cognos for AI model development - Overview and applications of IBM Watson - Hands-on with AI tools for real- world projects - Overview of IBM certifications in AI and data analytics |

Resource Persons for FDP



Dr. Saumendra Mohanty (Consultant Data Science & Al Trainer & Professor)

Dr. Saumendra Mohanty is a multifaceted professional who seamlessly bridges the worlds of academia and industry. With over 30 years of experience in multinational technology companies, he has established himself as a leader in the field. Dr. Mohanty's educational background, including a B.Tech in Electronics from NIT Calicut and a PGP from IMI Delhi, laid the foundation for his impressive career trajectory.

Throughout his career, Dr. Mohanty has held key leadership positions in renowned organizations such as Thermax, Wipro, Hughes Network Systems, Primus Telecommunications, and Tanla Platforms. His expertise extends beyond corporate leadership, as he has also proven himself to be a successful serial entrepreneur. Dr. Mohanty has demonstrated his acumen in the startup ecosystem by not only founding technology ventures but also successfully raising funds and achieving profitable exits.

In recent years, Dr. Mohanty has turned his attention to academia, bringing his wealth of industry experience to the classroom. As a Professor of Analytics and AI, he has taught at several prestigious institutions, including Bennett University and Sharda University. His academic focus areas include Statistics, Research Methodologies, Machine and Deep Learning with Python, and Generative AI.

He is currently Adjunct Professor of Practice (AI) in Bennett University and Area Chair & Professor (AI) in Lloyd Business School

Dr. Mohanty's commitment to education extends to doctoral-level mentorship, serving as a PhD Research Supervisor and participating in PhD defense panels at Liutebm University, Lusaka. He also contributes to faculty development by conducting programs on advanced topics such as Quantitative Research Methods, Machine Learning, and Text Analytics, utilizing cutting-edge tools like Python, Orange, and Jamov.



Dr. Neetu Bali Kamra (IBM Certified in Descriptive Analytics, Predictive Analytics & Design Thinking)

Dr. Neetu Bali Kamra holds a Doctorate in HR and Analytics and boasts over 18 years of experience in both corporate and academic settings. She has worked with Tata Consultancy Services as part of the Change Management Team and is a Certified Consultant in SAP-HR, contributing to notable projects such as Total Energies and McVitie's.

In 2021, she received the prestigious "Best Young Faculty Award" in Data Science from Analytics India Magazine. Currently, she serves as the Data Science and Artificial Intelligence Lead and Faculty at Lloyd Business School in Greater Noida. Dr. Kamra is also an IBM Master Certified professional in Business Intelligence, Predictive Analytics, and Artificial Intelligence, as well as a Master Certified in Design Thinking, having conducted numerous sessions across various business schools.

She holds three patents and has published over 20 papers in national and international journals, along with five book chapters.

Resource Persons for FDP



Mr. Mohit Agrawal (IBM Certified Trainer & Power BI Specialist)

Mr. Mohit Agrawal serves as an Associate Professor of IT and Analytics at Lloyd Business School. With 15 years of teaching experience at respected institutes across Delhi and NCR, he brings a solid foundation of knowledge and practical insights to his students. His industry experience is extensive, having worked in insurance, banking, and retail lending sectors. He has been associated with companies like Bajaj Allianz, ICICI Bank, and Magma Fincorp, managing credit analysis wings for over five years. This experience has taught him the critical role of analytics in various domains, highlighting its importance in driving informed decision-making and strategic planning.Mr. Agrawal has dedicated a significant part of his career to academic collaboration. He has been involved with several educational institutions such as BML Munjal University, Galgotias University, FIIB (Delhi), Accurate Institute, Sriram Business School, Sharda University, IILM, and AIMA. In these roles, he has contributed to numerous training and development sessions, focusing on Advanced Excel, Power BI, Excel Dashboarding, and Tableau. These sessions enhance practical skills, enabling participants to apply data analysis and visualization techniques effectively.

His teaching interests are diverse, encompassing Business Analytics, Advanced Excel, Power BI, Tableau, CRM, Operations Management, Data Modeling, Marketing Management, and Service Operations. Mr. Agrawal strives to make these subjects accessible and relevant, ensuring that students understand theoretical concepts and gain the ability to implement them in real-world scenarios. His approach to teaching emphasizes clarity and practical application, helping students build confidence in their analytical and managerial capabilities.Mr. Agrawal is committed to fostering an engaging and supportive learning environment. He believes in continuous learning and professional development, both for himself and his students. By integrating his industry experience with academic instruction, he aims to bridge the gap between classroom learning and practical application, preparing students for successful careers in their chosen fields. His dedication to education and professional growth makes him a valued mentor and educator.



Ms. Neha Issar (Assistant Professor IBM Spark & Scala certified, IIMBX Predictive Analytics Certified)

Ms. Neha Issar is a proactive professional with more than 13 years of experience in the corporate and academic. Her expertise extends to training in various areas, including Generative AI in HR domain, Database & Query Language, Data Science using R, Data Analytics for Business Decision-making, an Overview of Python, Management Information Systems, and Enterprise Resource Planning.

Ms. Issar earned her commerce degree from Dr. B.R. Ambedkar University, Agra and holds a postgraduate diploma in Finance and Marketing from JIMS Kalkaji. She is currently pursuing a PhD in Management from Amity Business School.

Her corporate journey includes serving as a Data Researcher at S&P Global Market Intelligence Pvt. Ltd., working on projects for prominent organizations such as Aditya Birla Group and Times Internet in et.com. She also held the position of Senior Manager Investor Relations at Opera Gratia Pvt Ltd.

In addition to her extensive experience, Ms. Issar holds several valuable certifications, including IBM Spark and Scala certification, IBM Data Science certification, and Cybersecurity certification. She is also a practitioner in IBM Enterprise Design Thinking and has received certification from IIM Bangalore in Predictive Analytics.

FDP Details

- Mode of the FDP is Online.
- This FDP will provide access to IBM Tools.
- All the participants will be given IBM Certified Certificates after fulfilling the attendance criteria of 70% and qualifying the assessment conducted on 5th day. It is mandatory to fill the feedback form shared at the end of each day.
- All participants must fill the registration form independently.

Registration & Payment Details

Registration Fees: INR 800/-

REGISTRATION LINK

https://forms.gle/8XGwJtbBTGYbH3fU8

Last Date for Registration: Dec. 15, 2024

Scan to Register:



For Payment:

Account Holder's Name: Maharaja Agrasen Institute of Management Studies Bank Name: Union Bank of India Bank Account No.: 394502010059876 IFSC Code: UBIN0560421 Branch: Sector 22, Rohini, Delhi – 110086

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