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Knowledge Park-II, Greater Noida (U.P.)







Value Added Certification Course

"BUSINESS ANALYTICS USING ADVANCED EXCEL WITH CHATGPT"

Resource Person:



For MBA 1st year | Starting from 5th Jan. 2024

Coordinator: Dr. Shefali Panwar

Mr. TARUN KUMAR

Artificial Intelligence Consultant, Full Stack Professional, and Corporate Trainer Toll Free: 1800 103 3797

www.mimt.org

Plot No. 8 & 9, Knowledge Park-II, Greater Noida, Delhi-NCR, India



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MANGALMAY INSTITUTE OF MANAGEMENT & TECHNOLOGY (Approved by AICTE, New Delhi & Affiliated to AKTU, Lucknow)

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1" Jan , 2024

NOTICE

Mangalmay Institute of Management & Technology is going to organise Add-on Certification Program"Business Analytics using Advanced Excel with ChatGPT"for the students of MBA 1styear (Sec A ,B & C) as per following details:

Starting Date: 5th Jan 2024

Total Duration: 30Hours

No. of Class: 10 Classes(3hrs each session)

Venue: Computer lab, Block B

Beneficiaries: MBA 1st Year (Sec A, B&C)

Resource person: Mr. Tarun Kumar Artificial Intelligence Consultant, Full Stack Professional, and

Corporate Trainer

Dr. Lalit Kumar Sharma Dean, MIMT

CC to:

Director Office **IQAC** Director HOD/Coordinator Faculty Members Notice Board Office File



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Syllabus

BUSINESS ANALYTICS USING ADVANCE EXCEL WITH CHAT GPT

DURATION: 30 HOURS

Syllabus



Business Analytics using adv excel and Chat GPT



Introduction to Business Analytics

- Understanding Business Analytics
- Definition and importance of Business Analytics
- · Role of data in decision-making
- Key concepts in analytics (Descriptive, Predictive, Prescriptive)

Excel Basics for Analytics

- · Excel interface and navigation
- · Data entry and formatting
- Basic formulas and functions (SUM, AVERAGE, COUNT, IF)

Data Import and Cleansing

- · Data Import
- Importing data from different sources into Excel (CSV, SQL, Web)
- · Data connection and refresh

Data Cleansing

- Data Visualization
- Introduction to Data Visualization
- · Importance of visualization in analytics
- · Types of charts (bar, pie, line, scatter)
- · Choosing the right chart for the data
- · Creating Charts in Excel
- · Building basic charts
- · Formatting charts for clarity
- Adding trendlines and data labels

Advanced Charting Techniques

- · Creating dynamic charts
- · Combining multiple charts
- · Using Excel's charting tools effectively

· Statistical Analysis in Excel

- · Descriptive Statistics
- Calculating mean, median, mode, and standard deviation
- · Using Excel's built-in functions for statistics



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Data Cleansing

- · Identifying and handling missing data
- Removing duplicates
- · Handling errors and outliers
- ٠

Data Transformation

- · Sorting and filtering data
- PivotTables for data summarization
- Introduction to Power Query for advanced data transformation

- · Using Excel's built-in functions for statistics
- Inferential Statistics
- · Hypothesis testing (t-tests, chi-square tests)
- · Correlation and regression analysis
- · Advanced Excel Functions for Analytics
- Using array formulas
- INDEX, MATCH, and VLOOKUP for data retrieval
- IF statements for conditional calculations
- Practical Statistical Analysis
- Analyzing sample datasets
- Interpretation of results

- Predictive Analytics
- · Introduction to Predictive Analytics
- What is predictive modeling?
- Types of predictive models (linear regression, decision trees, etc.)
- Building Predictive Models in Excel
- Linear regression in Excel
- Using Solver for optimization problems
- Model Evaluation and Validation
- Cross-validation techniques
- Interpreting model accuracy metrics (RMSE, MAE, P. squared)

- Case Studies and Practical Applications
- · Real-world Case Studies
- Analyzing real business cases with Excel and ChatGPT.
- · Identifying data-driven solutions
- Implementing Analytics Projects
- · Project management for analytics initiatives
- Best practices and challenges
- · Final Q&A and Certification



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- Introduction to <u>ChatGPT</u> for Predictive Insights
- · Integrating ChatGPT for predictive insights
- · Generating forecasts and recommendations
- · Prescriptive Analytics and Automation
- · Introduction to Prescriptive Analytics
- · What is prescriptive analytics?
- · Optimization problems in business
- · Solving Optimization Problems in Excel
- · Using Solver for resource allocation
- · Goal Seek for what-if analysis"

Automation with Macros Introduction to Excel VBA Recording and running macros

ChatGPT Automation

Leveraging ChatGPT for automating tasks Building custom ChatGPT script

SCHEDULE

BUSINESS ANALYTICS USING ADVANCE EXCEL WITH CHAT GPT

Session	Date
1	5.01.24
2	11.01.24
3	13.01.24
4	19.01.24
5	23.01.24
6	12.02.24
7	15.02.24
8	19.02.24
9	20.02.23
10	23.02.23



	REPORT		
Name of Activity	Business Analytics using Advanced Excel with Chat GPT(30 hours)		
Date	5 th Jan 2024 – 23 rd Feb. 2024		
Venue	Computer Lab Block B		
Organised by	MIMT, Greater Noida		
Name of Expert	Mr Tarun		
Participated by	139 ,MBA I YEAR Students		
Activity Convener	Dr. Shefali Panwar		
Content	MIMT organized certification course on Business Analytics using Advanced Excel with Chat GPT for MBA 1 st year students. It is of 30 hours course of 3hrs per session. There were 2 batches. The time of the sessions are batch 1- 10.30 am – 1.30pm and batch 2- 2.10pm-5.10pm. Day1:5.01.24Following content has been discussed in session 1 Introduction of MS Excel • Features of MS Excel • Parts of MS Excel • How to open Excel Example: Data Of merchandise, Personal monthly budget (templet use). Power Query Editor Navigation of worksheet &workbook. Function of Hyperlink, Define name, Range address. Day2:11.01.24 Following content has been discussed in session 2 Functions of Excels; • Change sheet name, tab color, hide – unhide, protect sheet, Undo &Redo • Fit column width in row or cell width, insert cell and row. Configuring page setup; • Insert the margin, custom the margin, collated		



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printing, customize the print option.

• Header &footer page Setups, page setup.

View properties of Excel;

- Customize the quick access the toolbar and ribbon.
- Freeze panes.

Customize Document properties;

Configuration worksheet/ worksheet for distribution;

- Inspecting worksheet for hidden properties
- Inspecting worksheet for accessibility issue.

DAY 3: 13.01.24 Following content has been discussed in session 3
Insert Data in Cell and Range, Format Cell and Range (Merge cell, Format painter, Wrape text, Cell style, Number formatting), Summarize data with conditional formatting, 10 min Challenge Assessment (also instruct to upload on google link)

DAY 4:19.01.24 Following content has been discussed in session 4

Insert Sparklines & Insert Subtotals.

Create & Manage Tables

- Creat tables from ranges
 - Convert tables back to range
 - Modify table contents.

Table tool;

- Summarize with pivot table
- Insert slicer
- Remove Duplicate
- Custome short.

5min Challenge task Assesment (Also Instructed To upload In Google link)

DAY 5:23.01.24, Following content has been discussed in session 5 Chart Extension in Data Ribbon

Types Of Charts

Column, Line, Piechart, Bar, Areachart, Scatter chart, MAP, Stock Chart, Surface Chart, Radar Chart, Tree Map, Sunburst Chart, Donut Chart, Histogram, Waterfall, Funnel Chart, Combo .(Kinds of each individual charts, Purpose Of Charts)



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Difference Between PoweBI and Ms Excel Chart (Excel-Statistical Chart, PowerBI – Dynamic Chart) With a small example.

Chart Design

5 min Challenge task Assesment(Also Instructed To Upload on Google link)

DAY 6: 12.02.24 Following content has been discussed in session 6

Function Of Data In Excel

- Difference Between Function Decleration & Function Definitation
- Basic Formula
- Logic Formula
- Math Formula
- Lookup and Reference Formula
- Stats Formula
- Text Formula
- Date and Time Formula

Cover the topic of Basic Formula , Logic formula & Math formula

DAY 7: 15.02.24 Following content has been discussed in session 7

Edate

Date Function in excel

Text to Date (Date Value & Time Value)

Work Day, Workday .intel, Network days

Reference Formula

• Vlookup, Hlookup, Index, Match etc

DAY 8: 19.02.24 Following content has been discussed in session 8 Excel Pivot Table Pivot Table Design

How to select the category in Pivot Table by the situtation given in questions.

Pivot Table options : Layout&Formate, Tools &Filetrs and Display.

Slicer Tools, Report Connections & Field Settings

DAY 9: 20.02.24 Following content has been discussed in session 9

Pivot Chart

Pivot Chart Analyze, Design And Formate

07_01 Challenge of time interval of 1 hr task Assesment(



	Also Instructed To Upload on Google link).		
	DAY 10: 23.02.24 Following content has been discussed in session 10 Practise of 07 _01 challenges for quick revision.		
	Text formula (MID, TRIM, SUBSTITUTE< CONCATE etc)		
	practise.		
	About ChatGPT; (Chat GenerativePre-Trained Transformer)		
	ChatGPT kind of Neural Network.		
	Function Of Prompts in ChatGPT Excel.		
	Uses of Developers for the Function of ChatGPT in Excel.		
	Functions of VBA Macros(Visual Basic Application creat		
	customer user-generated functions).		
	And the finally the session was over with the prize distribution ceremony. Also the token of appreciation was given to the Dr. Shefali Panwar. And in this way the session was successfully over with the good note.		
Objective	The main aim of this certification program is to provide the advance knowledge of Excel to the students. Through this they get to know the important formula used in Business analysis.		
Outcome of Activity	 Following points explain the outcomes from the Course: After the completion of the certification the main benefit is that the students get the advance knowledge aboutExcel. They also understand the use of different tools and functions 		
	 studentscan also use this knowledge at the time of interview in any company in future. 		



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Figure 1 During the session explaining the concepts

During the Session



Figure 2During the session explaining the concepts



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During the Session



Figure 3During the session explaining the concepts



Figure 4During the session explaining the concepts





Figure 5During the session explaining the concepts



Figure 6During the session explaining the concepts



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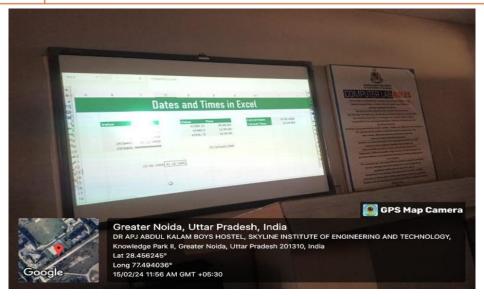


Figure 7During the session explaining the concepts



Figure 8During the session explaining the concepts



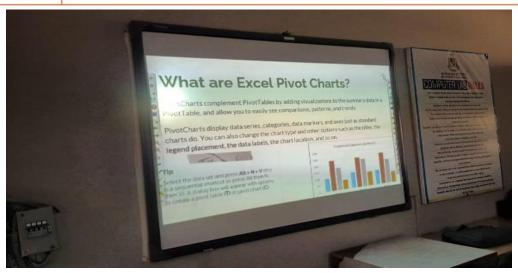


Figure 9During the session explaining the concepts



Figure 10During the session explaining the concepts



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LIST OF REGISTERED AND COMPLETED STATUS

Sr.no	Student Name	Father Name	Score
1	Aakanksha Mishra	Pradeep Kumar Mishra	68 / 100
2	Abhay Yadav	Mr. Sohan Singh Yadav	72 / 100
3	Abhi Saxena	Vikas Saxena	46 / 100
4	Abhishek Kumar Gour	Ramkhesh Gour	74 / 100
5	Abhishek Sharma	Ravikant Sharma	68 / 100
6	Adarsh Gupta	Madan Prasad Gupta	84 / 100
7	Aditi Tyagi	Subodh Tyagi	60 / 100
8	Aditya Pandey	Ganges Narayan Pandey	40 / 100
9	Aditya Rajput	Mr. Vijay Rajput	78 / 100
10	Aditya Singh	Devendra Singh	74 / 100
11	Akash Baghel	Mr. Pramod Baghel	66 / 100
12	Akash Jaiswal	Subhash Jaiswal	68 / 100
13	Alfiya Siddiqui	Mohd Ashif Siddiqui	68 / 100
14	Amrita Jayashwal	Laxman Jaiswal	64 / 100
15	Anchal Singh	Subhash Singh	66 / 100
16	Anchal Srivastava	Dilip Kumar Srivastava	68 / 100
17	Anil Guru	Balaram Guru	24 / 100
18	Anisha Agrawal	Anil Agrawal	62 / 100
19	Anjanay Yadav	Saurabh Yadav	66 / 100
20	Anju Sharma	Jitendra Sharma	68 / 100
21	Anmol Tiwari	Mr. Ramji Tiwari	76 / 100
22	Anshika Shukla	Ramesh Shukla	66 / 100
23	Anubhav Teotia	Aman Teotia	78 / 100
24	Anurag Singh	Jai Prakash Singh	66 / 100
25	Anurag Yadav	Ram Chandra Yadav	38 / 100
26	Arvind Sahani	Devendra Sahani	66 / 100
27	Ashutosh Kumar Thakur	Bipin Thakur	54 / 100
28	Ashwani Kumar	Omshankar	78 / 100
29	Avanish Kumar Pandey	Jitendra Pandey	74 / 100
30	Ayushi	Dharmender Singh	74 / 100
31	Bhaskar Sharma	Mr.Kuber Dutt Sharma	60 / 100
32	Chandni	Riyaz Khan	46 / 100
33	Chetan Giri	Mahesh Giri	66 / 100
34	Chhitiz Rai	Anil Rai	64 / 100



35	Chirag Goyal	Rajesh Goyal	70 / 100
36	Deepak Singh	Phoolan Singh	66 / 100
37	Deepali Singh	Kaushlendra Kumar Singh	76 / 100
38	Dharamveer	Chhote Lal	72 / 100
39	Dharmendra Dubey	Shivpersan Dubey	74 / 100
40	Dhruv Sharma	Ashok Kumar Sharma	80 / 100
41	Dilnawaz Ahmad	Rais Ahmad	78 / 100
42	Divya Tiwari	Kripa Shankar Tiwari	80 / 100
43	Drishty Sharma	Sanjeev Sharma	78 / 100
44	Faheem Ahmad	Shafique Ahmad	70 / 100
45	Gaddam Karthik Kumar	G. Surya Narayana	86 / 100
46	Garima Shukla	Arjun Kumar Shukla	34 / 100
47	Gaurav Singh	Pooran Singh	62 / 100
48	Gaurav Singh	Pradeep Kumar Singh	68 / 100
49	Govind Kumar Pathak	Siyaram Pathak	74 / 100
50	Gunjan	Mr. Amarpal Singh	76 / 100
51	Harsh Jaiswal	Santosh Jaiswal	60 / 100
52	Hema	Mr. Bablu	60 / 100
53	Isha Bararia	Arun Bararia	60 / 100
54	Ishika Dhiman	Puran Singh Dhiman	60 / 100
55	Ishita Gupta	Mr. Nitin Gupta	64 / 100
56	Jagriti Kumari	Beer Prakash Choudhary	80 / 100
57	Jai	Pawan Kumar	62 / 100
58	Kajal Pandit	Om Prakash Pandit	72 / 100
59	Katyayan	Girish Chandra Rai	82 / 100
60	Km Ambika	Arun Kumar Gupta	58 / 100
61	Komal Kumari	Uday Kumar Bhagat	82 / 100
62	Komal Sharma	Madhusudan Sharma	60 / 100
63	Kunal Gupta	Ajay Kumar Gupta	70 / 100
64	Kunal Sharma	Deepak Sharma	68 / 100
65	Lucky	Mr. Vijay Kumar	74 / 100
66	Mahima Kumari	Ranbir Singh	68 / 100
67	Malika Shahi	Shamshad Shahi	76 / 100
68	Manali Verma	Sarvesh Chandra	60 / 100
69	Manoj Chauhan	Naresh Chauhan	72 / 100
70	Md Shadman	Mosarrat Ali	78 / 100
71	Mohd Faizan Ali	Mohd Ashraf Ali	58 / 100



72	Mohit Shrivastav	Arun Shrivastav	58 / 100
73	Mukesh Kumar	Khago Kumhar	72 / 100
74	Muskan Kumar	Ramnarayan Singh	74 / 100
75	Naveen Shukla	Mr.Ramphal Shukla	70 / 100
76	Neha	Mahipal Singh	74 / 100
77	Neha Kumari	Santosh Kumar	66 / 100
78	Nikhil Singh	Surjeet Pratap Singh	54 / 100
79	Nitesh Pandey	Ram Naresh Pandey	72 / 100
80	Pragya Kumari	Santosh Pandey	76 / 100
81	Prashant Kumar Giri	Arvind Giri	40 / 100
82	Pratap Kumar Choudhary	Sushil Kumar Choudhary	74 / 100
83	Prathma Pandey	Devendra Kumar Pandey	66 / 100
84	Prince Kumar	Shiv Shankar Singh	42 / 100
85	Priya Bharti	Sohan Pal Singh	58 / 100
86	Priya Kumari	Pramod Kumar	76 / 100
87	Priyanka Kumari	Vijay Kumar	50 / 100
88	Priyanshu Vishwakarma	Tilak Vishwakarma	72 / 100
89	Puneet Sharma	Mukesh Sharma	78 / 100
90	Pyush Dev	Mr. Anupam Kumar	68 / 100
91	Radha Singh	Mr. Nandlal Singh	46 / 100
92	Rahul Goyal	Manoj Goyal	80 / 100
93	Rahul Gupta	Ashok Gupta	66 / 100
94	Rahul Kumar	Gauri Shankar Ray	68 / 100
95	Raj Kumar Vishwakarma	Arun Vishwakarma	70 / 100
96	Rajeev Tiwari	Suresh Kumar Tiwari	66 / 100
97	Rajshree	Shubhankar Kumar Chatterjee	42 / 100
98	Ritu Raj	Pramod Kumar Poddar	66 / 100
99	Roshan Sahu	Pramod Sahu	52 / 100
100	Rupali Mudgil	Ravi Kumar Mudgil	74 / 100
101	Sabeeha Kiran	Mohd Saleem Ansari	72 / 100
102	Sachin Kumar Verma	Ramesh Chandra Verma	76 / 100
103	Sangam Shakya	Nahar Singh	84 / 100
104	Saurabh Tiwari	Satish Tiwari	58 / 100
105	Saurabh Tiwari	Rakesh Kumar Tiwari	74 / 100
106	Saurav Kumar	Vinay Kumar	80 / 100
107	Saurav Kumar Choudhary	Akhileshwar Choudhary	66 / 100
108	Shivam Sharma	Sushil Sharma	68 / 100
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109	Shivam Verma	Krishna Kumar Verma	42 / 100
110	Shoubhik Dey	Suresh Kumar Dey	78 / 100
111	Shreya Ranjan	Santosh Kumar	72 / 100
112	Shreya Singh	Np Singh	68 / 100
113	Shristi Gupta	Bharat Prasad	60 / 100
114	Shubham Kumar	Manish Kumar	76 / 100
115	Shubhangi Kumari	Om Prakash Nirala	68 / 100
116	Sneha Sharma	Rajneesh Sharma	66 / 100
117	Sohini Chauhan	Suresh Chauhan	68 / 100
118	Sonakshi Sharma	Sanjay Sharma	42 / 100
119	Sonali Pandey	Ajay Kumar Pandey	76 / 100
120	Sonu Kumar Pandey	Satendra Pandey	58 / 100
121	Stuti Tiwari	Mr. Ramakant Tiwari	74 / 100
122	Sumbul Akhtar	Akhtar Ali	74 / 100
123	Sumit Yadav	Rajendra Singh Yadav	80 / 100
124	Suraj Singh Yadav	Laturi Singh Yadav	72 / 100
125	Tanisha Singh	Krishna Nandan Singh	76 / 100
126	Tanya Singh Sengar	Surendra Singh Sengar	84 / 100
127	Tej Pal Singh	Ramdas Prajapati	72 / 100
128	Udit Kushwaha	Vimlesh Kumar Kushwaha	64 / 100
129	Vaishnavi Rai	Sudhakar Rai	58 / 100
130	Vansh Saini	Anil Kumar Saini	80 / 100
131	Varsha Jain	Devendra Jain	72 / 100
132	Vikesh Yadav	Mr. Sanoj Ray Yadav	78 / 100
133	Vineet Shukla	Arvind Shukla	74 / 100
134	Vishal Rathi	Sanjay Rathi	64 / 100
135	Vishal Yadav	Parma Kumar Yadav	80 / 100
136	Vivek Kumar	Gauri Shankar Verma	76 / 100
137	Vyom Singh	Ravindra Singh	68 / 100
138	Yashi Goyal	Mr.Mohit Goyal	66 / 100
139	Yompi Nyodu	Ego Nyodu	76 / 100



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TRAINER'S PROFILE

Mr. Tarun(Artificial Intelligence Consultant, Full Stack Professional, and Corporate Trainer)

5+ years of Industry-Oriented experience Training in Full Stack Development, Data Science with Generative-AI enabled Solutioning, Cloud, Chatbot Development, and other technologies in Information Technology. Proven track record of training nearly 5000+ students and working professionals across India for the past 5 years. Possess a passion towards developing content and delivering it to induction batches and laterals. Have worked and trained individuals on the latest technologies, created multiple online courses, provide leadership, training, and feedback to ensure that attendees can perform their best in the real-life industry-based projects.

TECHNICAL SKILLS- Programming Languages: Python, C, C++, Java 8, Java 11, JavaScript, Angular JS, NodeJS React JS, SQL, PL/SQL, HTML 5, CSS 3, Android SDK Data/Business Intelligence Tools: Expert – MS Excel, Office 365, Power BI, Tableau Data Science Tech Stack: Machine Learning (Supervised & Unsupervised), Deep Learning (CNN, ANN, NLP, OpenCV)

Work History

DIGITAL LYNC | NEW DELHI, DELHI, INDIA Full-Stack Trainer (Freelance) | November 2023 – December 2023

- Conducted a detailed Full Stack Training Workshop via the Learnings platform for 300+ B. Tech Students and Corporate Professionals from development background.
- Training Topics: JavaScript · React JS · NodeJS · Bootstrap · HTML & CSS.

WELINGKAR INSTITUTE OF MANAGEMENT | MATUNGA, MUMBAI, INDIA Data Analytics Trainer (Freelance) | October 2023 – November 2023

- Conducted a detailed Data Analytics Workshop via the Learnings platform for 300+ M.B.A. students
- Data Analytics Training Topics: Microsoft Excel · Microsoft Power BI · Statistical Data Analysis · Python (Programming Language) · Microsoft Office.



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Certificate



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