DVV Clarification for 1.2.1
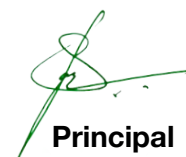
Number of Certificate or Value Added Courses

Timetables of All Courses

(Enclosed in the below given order)

S.No	Name of Certificate/Value Added Course	Academic Year
1	Certificate Program on Cyber Security	**2023-24**
2	Training Program on Project Management	2023-24
3	Certificate Program on Video Analytics	2023-24
4	Bridge Course on Fundamentals of Programming	2023-24
5	Bridge Course on Fundamentals of Statistics	2023-24
6	Certificate Program on DataScience and BigData Analytics	2023-24
7	Certificate Program on Start-Up Marketing	2023-24
8	Certificate Program on AI and ML in Business	2023-24
9	Training Program on IT Fundamentals	2023-24
10	Training Program on Django	2023-24
11	Certificate Program on Leadership Development	2023-24
12	Certificate Program on Entrepreneurial Strategic Management	2023-24
13	Certificate Program on Investment Risk Management	**2022-23**
14	Certificate Program on Python for IoT	2022-23
15	Bridge Course on Fundamentals of Statistics	2022-23
16	Certificate Program on Ethical Hacking	2022-23
17	Training Program on Digital Tools for Business	2022-23
18	Certificate Program on Financial Modeling	2022-23
19	Bridge Course on Fundamentals of Programming	2022-23
20	Certificate Program on Google Cloud	2022-23
21	Training Program on Data Analytics	2022-23
22	Certificate Program on Business Analytics and DataScience	2022-23
23	Training Program on Generative AI	2022-23
24	Certificate Program on Agile Project Management	**2021-22**

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

S.No	Name of Certificate/Value Added Course	Academic Year
25	Bridge Course on Fundamentals of Statistics	2021-22
26	Certificate Program on HR Analytics	2021-22
27	Bridge Course on Fundamentals of Programming	2021-22
28	Certificate Program on Cloud Computing and Virtualization	2021-22
29	Certificate Program on Corporate Governance	2021-22
30	Training Program on Chatbots	2021-22
31	Certificate Program on Quantum Computing and Quantum Programming	2021-22
32	Training Program on DataScience with Python	2021-22
33	Certificate Program on Mobile App Development	**2020-21**
34	Certificate Program on Cloud Computing and DevOPS	2020-21
35	Bridge Course on Fundamentals of Statistics	2020-21
36	Bridge Course on Fundamentals of Programming	2020-21
37	Certificate Program on Enterprise Resource Planning	2020-21
38	Certificate Program on Augmented Reality and Virtual Reality	2020-21
39	Certificate Program on Leadership in the Digital Age	**2019-20**
40	Certificate Program on Natural Language Processing	2019-20
41	Training Program on Finance and Accounting	2019-20
42	Training Program on SQL and Database Design	2019-20
43	Certificate Program on Design Thinking and Innovation	2019-20
44	Certificate Program on Human Resources	2019-20
45	Certificate Program on BlockChain and Cryptocurrency	2019-20

Principal
Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

1.2.1. Certificate/Value Added Courses

Timetables

1. Certificate Program on Cyber Security

AURORA'S PG COLLEGE (MCA)
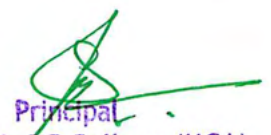## Peerzadiguda, Uppal, Hyderabad-500092

Certificate Program on Cyber Security
Organized by Department of Computer Applications
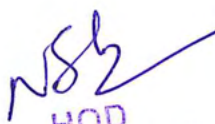
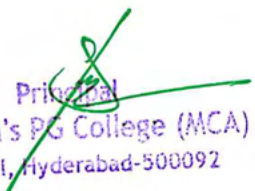**Duration: 03.10.2023 to 13.10.20323**

Time Table

Day	Time	Session	Topic
03.10.2023	02:00 PM – 03:00 PM	1	Module 1: Introduction to Cybersecurity Overview of Cybersecurity
	03:00 PM – 04:00 PM	2	Key Concepts and Terminology
	04:00 PM – 05:00 PM	3	Importance and Impact of Cybersecurity
04.10.2023	02:00 PM – 03:00 PM	4	Module 2: Cyber Threats and Vulnerabilities Types of Cyber Threats (Malware, Phishing, Ransomware, etc.)
	03:00 PM – 04:00 PM	5	Vulnerability Assessment
	04:00 PM – 05:00 PM	6	Risk Management and Analysis
05.10.2023	02:00 PM – 03:00 PM	7	Module 3: Network Security Fundamentals of Network Security
	03:00 PM – 04:00 PM	8	Firewalls, Intrusion Detection Systems (IDS), and Intrusion Prevention Systems (IPS)
	04:00 PM – 05:00 PM	9	Network Segmentation and Access Control
06.10.2023	02:00 PM – 03:00 PM	10	Module 4: Cryptography Basic Cryptographic Principles
	03:00 PM – 04:00 PM	11	Symmetric vs. Asymmetric Encryption
	04:00 PM – 05:00 PM	12	Hashing and Digital Signatures
07.10.2023	02:00 PM – 03:00 PM	13	Module 5: Security Protocols and Technologies Secure Sockets Layer (SSL) and Transport Layer Security (TLS)
	03:00 PM – 04:00 PM	14	Virtual Private Networks (VPNs)
	04:00 PM – 05:00 PM	15	Public Key Infrastructure (PKI)

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

09.10.2023	02:00 PM – 03:00 PM	16	Module 6: Authentication and Authorization Authentication Methods (Passwords, Biometrics, Multi-Factor Authentication)
	03:00 PM – 04:00 PM	17	Access Control Models (Discretionary, Mandatory, Role-Based)
	04:00 PM – 05:00 PM	18	Identity and Access Management (IAM)
10.10.2023	02:00 PM – 03:00 PM	19	Module 7: Securing Web Applications Common Web Application Vulnerabilities (SQL Injection, Cross-Site Scripting)
	03:00 PM – 04:00 PM	20	Secure Coding Practices
	04:00 PM – 05:00 PM	21	Web Application Firewalls (WAF)
11.10.2023	02:00 PM – 03:00 PM	22	Module 8: Incident Response and Management Incident Response Planning
	03:00 PM – 04:00 PM	23	Detection, Containment, Eradication, and Recovery
	04:00 PM – 05:00 PM	24	Post-Incident Analysis and Reporting
12.10.2023	02:00 PM – 03:00 PM	25	Module 9: Compliance and Legal Issues Data Protection Regulations (GDPR, CCPA)
	03:00 PM – 04:00 PM	26	Legal and Ethical Considerations in Cybersecurity
	04:00 PM – 05:00 PM	27	Compliance Requirements and Auditing
13.10.2023	02:00 PM – 03:00 PM	28	Module 10: Emerging Trends and Future Directions Advanced Persistent Threats (APTs) Cloud Security
	03:00 PM – 04:00 PM	29	Internet of Things (IoT) Security Future Challenges and Innovations in Cybersecurity
	04:00 PM – 05:00 PM	30	Final Exam

HOD
Dept. of Computer Applications
Aurora's P.G College, Uppal

Principal
Aurora's P.G College (MCA)
Uppal, Hyderabad-500092

1.2.1. Certificate/Value Added Courses

Timetables

2. Training Program on Project Management

AURORA'S PG COLLEGE (MCA)
Peerzadiguda, Uppal, Hyderabad-500092

Training Program on: Project Management
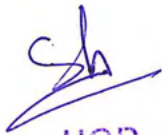**Organized by Department of Business Administration**

Duration: 09.10.2023 to 19.10.2023

Time Table

Day	Time	Session	Topic
09.10.2023	02:00 PM – 03:00 PM	1	Module 1: Introduction to Project Management Overview of project management concepts
	03:00 PM – 04:00 PM	2	Project lifecycle and phases
	04:00 PM – 05:00 PM	3	Role of a project manage
10.10.2023	02:00 PM – 03:00 PM	4	Module 2: Project Initiation Defining project scope and objectives
	03:00 PM – 04:00 PM	5	Stakeholder identification and engagement
	04:00 PM – 05:00 PM	6	Project charter development
11.10.2023	02:00 PM – 03:00 PM	7	Module 3: Project Planning Work Breakdown Structure (WBS)
	03:00 PM – 04:00 PM	8	Time management and scheduling techniques Budgeting and resource allocation
	04:00 PM – 05:00 PM	9	Module 4: Risk Management Identifying and analyzing project risks
12.10.2023	02:00 PM – 03:00 PM	10	Risk mitigation strategies
	03:00 PM – 04:00 PM	11	Developing a risk management plan
	04:00 PM – 05:00 PM	12	Module 5: Project Execution Leading project teams and managing resources
13.10.2023	02:00 PM – 03:00 PM	13	Effective communication strategies
	03:00 PM – 04:00 PM	14	Quality assurance and control measures
	04:00 PM – 05:00 PM	15	Module 6: Monitoring and Controlling Key performance indicators (KPIs) Progress tracking and reporting

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

16.10.2023	02:00 PM – 03:00 PM	16	Change management processes
	03:00 PM – 04:00 PM	17	Module 7: Project Closure Final deliverables and acceptance
	04:00 PM – 05:00 PM	18	Conducting project reviews and retrospectives Documenting lessons learned
17.10.2023	02:00 PM – 03:00 PM	19	Module 8: Agile Project Management Overview of Agile methodologies (Scrum, Kanban)
	03:00 PM – 04:00 PM	20	Benefits and challenges of Agile project management
	04:00 PM – 05:00 PM	21	Implementing Agile practices in projects
18.10.2023	02:00 PM – 03:00 PM	22	Module 9: Project Management Software Tools Introduction to popular project management tools (e.g., MS Project, Trello, Asana)
	03:00 PM – 04:00 PM	23	Using software for scheduling and tracking
	04:00 PM – 05:00 PM	24	Collaboration tools for project teams
19.10.2023	02:00 PM – 03:00 PM	25	Module 10: Case Studies and Best Practices Analyzing successful and failed projects
	03:00 PM – 04:00 PM	26	Learning from real-world project management scenarios Developing a personal project management toolkit
	04:00 PM – 05:00 PM	27	Final Exam

HOD
Dept. of Business Management
Aurora's P.G College, Uppal

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

1.2.1. Certificate/Value Added Courses

Timetables

3. Certificate Program on Video Analytics

Certificate Program on Video Analytics
Organized by Department of Business Administration
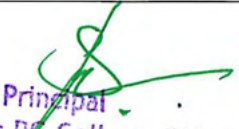
Duration: 14.11.2023 to 25.11.2023

Time Table

Day	Time	Session	Topic
14.11.2023	02:00 PM – 03:00 PM	1	Module 1: Introduction to Video Analytics Overview of Video Analytics
	03:00 PM – 04:00 PM	2	Key Concepts and Terminology
	04:00 PM – 05:00 PM	3	Applications and Use Cases
15.11.2023	02:00 PM – 03:00 PM	4	Module 2: Video Data Acquisition and Preprocessing Video Capture Technologies
	03:00 PM – 04:00 PM	5	Data Formats and Storage
	04:00 PM – 05:00 PM	6	Preprocessing Techniques (Normalization, Noise Reduction)
16.11.2023	02:00 PM – 03:00 PM	7	Module 3: Object Detection Techniques Introduction to Object Detection
	03:00 PM – 04:00 PM	8	Techniques and Algorithms (YOLO, SSD, Faster R-CNN)
	04:00 PM – 05:00 PM	9	Practical Applications and Challenges
17.11.2023	02:00 PM – 03:00 PM	10	Module 4: Object Tracking Algorithms
	03:00 PM – 04:00 PM	11	Basics of Object Tracking
	04:00 PM – 05:00 PM	12	Tracking Methods (Kalman Filter, SORT, DeepSORT) Tracking Challenges and Solutions
18.11.2023	02:00 PM – 03:00 PM	13	Module 5: Behavior and Activity Analysis Behavior Analysis Techniques
	03:00 PM – 04:00 PM	14	Activity Recognition Methods (Temporal Models, RNNs)
	04:00 PM – 05:00 PM	15	Case Studies and Applications

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

Date	Time	No.	Topic
20.11.2023	02:00 PM – 03:00 PM	16	Module 6: Facial Recognition Technologies
	03:00 PM – 04:00 PM	17	Principles of Facial Recognition
	04:00 PM – 05:00 PM	18	Key Techniques (Face Detection, Feature Extraction, Matching)
21.11.2023	02:00 PM – 03:00 PM	19	Applications and Ethical Considerations
	03:00 PM – 04:00 PM	20	Module 7: Integration and Deployment
	04:00 PM – 05:00 PM	21	Designing Video Analytics Systems
22.11.2023	02:00 PM – 03:00 PM	22	System Integration with Existing Infrastructure
	03:00 PM – 04:00 PM	23	Deployment Considerations and Best Practices
	04:00 PM – 05:00 PM	24	Module 8: Performance Evaluation and Metrics Evaluating Accuracy and Performance
23.11.2023	02:00 PM – 03:00 PM	25	Metrics (Precision, Recall, F1 Score) Benchmarking and Testing
	03:00 PM – 04:00 PM	26	Module 9: Advanced Topics in Video Analytics Deep Learning Approaches in Video Analytics
	04:00 PM – 05:00 PM	27	Real-Time Video Analytics
24.11.2023	02:00 PM – 03:00 PM	28	Emerging Trends and Technologies
	03:00 PM – 04:00 PM	29	Module 10: Real-World Applications and Case Studies
	04:00 PM – 05:00 PM	30	Security and Surveillance
25.11.2023	02:00 PM – 03:00 PM	31	Retail and Customer Behavior Analysis
	03:00 PM – 04:00 PM	32	Traffic Management and Smart Cities
	04:00 PM – 05:00 PM	33	Final Exam

HOD
Dept. of Business Management
Aurora's P.G College, Uppal

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

1.2.1. Certificate/Value Added Courses

Timetables

4. Bridge Course on Fundamentals of Programming

AURORA'S PG COLLEGE (MCA)
Peerzadiguda, Uppal, Hyderabad-500092

Bridge Course on Fundamentals of Programming
Organized by Department of Computer Applications
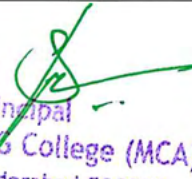
Duration: 14.11.2023 to 25.11.2023

Time Table

Day	Time	Session	Topic
14.11.2023	02:00 PM – 03:00 PM	1	Module 1: Introduction to Programming Overview of Programming Languages
	03:00 PM – 04:00 PM	2	Introduction to Basic Syntax and Structure
	04:00 PM – 05:00 PM	3	Setting Up the Programming Environment
15.11.2023	02:00 PM – 03:00 PM	4	Module 2: Variables and Data Types Understanding Variables and Constants
	03:00 PM – 04:00 PM	5	Primitive Data Types: Integers, Floats, Characters, and Booleans
	04:00 PM – 05:00 PM	6	Type Conversion and Type Casting
16.11.2023	02:00 PM – 03:00 PM	7	Module 3: Operators and Expressions Arithmetic Operators
	03:00 PM – 04:00 PM	8	Relational and Logical Operators
	04:00 PM – 05:00 PM	9	Expression Evaluation and Precedence
17.11.2023	02:00 PM – 03:00 PM	10	Module 4: Control Structures Conditional Statements
	03:00 PM – 04:00 PM	11	Looping Constructs
	04:00 PM – 05:00 PM	12	Nested Loops and Conditional Statements
18.11.2023	02:00 PM – 03:00 PM	13	Module 5: Functions and Modular Programming Defining and Calling Functions
	03:00 PM – 04:00 PM	14	Function Parameters and Return Values
	04:00 PM – 05:00 PM	15	Scope and Lifetime of Variables

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

20.11.2023	02:00 PM – 03:00 PM	16	Module 6: Arrays and Data Structures Introduction to Arrays
	03:00 PM – 04:00 PM	17	Multi-dimensional Arrays
	04:00 PM – 05:00 PM	18	Basic Data Structures: Lists and Strings
21.11.2023	02:00 PM – 03:00 PM	19	Module 7: Error Handling and Debugging Common Programming Errors and Exceptions
	03:00 PM – 04:00 PM	20	Techniques for Debugging Code
	04:00 PM – 05:00 PM	21	Using Debugging Tools
22.11.2023	02:00 PM – 03:00 PM	22	Module 8: Basic Algorithms and Problem Solving Introduction to Algorithms
	03:00 PM – 04:00 PM	23	Basic Sorting and Searching Techniques
	04:00 PM – 05:00 PM	24	Developing and Implementing Simple Algorithms
23.11.2023	02:00 PM – 03:00 PM	25	Module 9: Project Work and Application Applying Concepts to a Small Project
	03:00 PM – 04:00 PM	26	Integrating Different Programming Constructs
	04:00 PM – 05:00 PM	27	Presenting and Discussing Solutions
24.11.2023	02:00 PM – 03:00 PM	28	Module 10: Review and Future Directions Review of Key Concepts
	03:00 PM – 04:00 PM	29	Introduction to Advanced Topics
	04:00 PM – 05:00 PM	30	Resources for Further Learning
25.11.2023	03:00 PM – 04:00 PM	31	Final Exam

HOD
Dept. of Computer Applications
Aurora's P.G College, Uppal

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

1.2.1. Certificate/Value Added Courses

Timetables

5. Bridge Course on Fundamentals of Statistics

AURORA'S PG COLLEGE (MCA)
Peerzadiguda, Uppal, Hyderabad-500092

Bridge Course on Fundamentals of Statistics
Organized by Department of Business Management

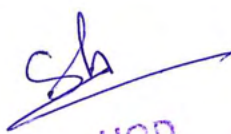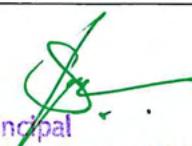**Duration: 11.12.2023 to 21.12.2023**

Time Table

Day	Time	Session	Topic
11.12.2023	02:00 PM – 03:00 PM	1	Module 1: Introduction to Statistics Definition and Scope of Statistics
	03:00 PM – 04:00 PM	2	Types of Data: Qualitative vs. Quantitative
	04:00 PM – 05:00 PM	3	Levels of Measurement: Nominal, Ordinal, Interval, Ratio
12.12.2023	02:00 PM – 03:00 PM	4	Module 2: Descriptive Statistics Measures of Central Tendency: Mean, Median, Mode
	03:00 PM – 04:00 PM	5	Measures of Dispersion: Range, Variance, Standard Deviation
	04:00 PM – 05:00 PM	6	Data Visualization: Histograms, Bar Charts, Box Plots
13.12.2023	02:00 PM – 03:00 PM	7	Module 3: Probability Basics Fundamental Concepts: Experiment, Sample Space, Events
	03:00 PM – 04:00 PM	8	Probability Rules: Addition and Multiplication Rules
	04:00 PM – 05:00 PM	9	Conditional Probability and Independence
14.12.2023	02:00 PM – 03:00 PM	10	Module 4: Probability Distributions Discrete Distributions: Binomial Distribution
	03:00 PM – 04:00 PM	11	Continuous Distributions: Normal Distribution
	04:00 PM – 05:00 PM	12	Properties and Applications of Distributions
15.12.2023	02:00 PM – 03:00 PM	13	Module 5: Sampling and Sampling Distributions Types of Sampling Methods: Random, Stratified, Cluster
	03:00 PM – 04:00 PM	14	Sampling Distribution of the Sample Mean
	04:00 PM – 05:00 PM	15	Central Limit Theorem

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

Date	Time	No.	Topic
16.12.2023	02:00 PM – 03:00 PM	16	Module 6: Inferential Statistics Hypothesis Testing: Null and Alternative Hypotheses
	03:00 PM – 04:00 PM	17	Type I and Type II Errors
	04:00 PM – 05:00 PM	18	Common Tests: t-Test, Chi-Square Test, ANOVA
18.12.2023	02:00 PM – 03:00 PM	19	Module 7: Correlation and Regression Understanding Correlation: Pearson's r
	03:00 PM – 04:00 PM	20	Simple Linear Regression: Model Fitting and Interpretation
	04:00 PM – 05:00 PM	21	Multiple Regression Analysis
19.12.2023	02:00 PM – 03:00 PM	22	Module 8: Using Statistical Software Introduction to Statistical Software (e.g., R, SPSS, Excel)
	03:00 PM – 04:00 PM	23	Data Import and Cleaning
	04:00 PM – 05:00 PM	24	Conducting Basic Statistical Analysis and Creating Visualizations
20.12.2023	02:00 PM – 03:00 PM	25	Module 9: Practical Applications and Case Studies Real-World Data Analysis Examples
	03:00 PM – 04:00 PM	26	Case Studies and Application of Statistical Methods
	04:00 PM – 05:00 PM	27	Interpretation of Results and Report Writing
21.12.2023	02:00 PM – 03:00 PM	28	Module 10: Review and Future Directions
	03:00 PM – 04:00 PM	29	Recap of Key Concepts Introduction to Advanced Topics in Statistics
	04:00 PM – 05:00 PM	30	Final Exam

1.2.1. Certificate/Value Added Courses

Timetables

6. Certificate Program on DataScience and BigData Analytics

AURORA'S PG COLLEGE (MCA)
Peerzadiguda, Uppal, Hyderabad-500092

Certificate Program on DataScience and BigData Analytics
Organized by Department of Computer Applications
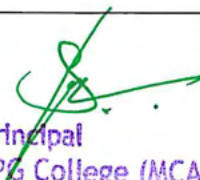
Duration: 11.12.2023 to 21.12.2023

Time Table

Day	Time	Session	Topic
11.12.2023	02:00 PM – 03:00 PM	1	Module 1: Introduction to Data Science Overview of Data Science
	03:00 PM – 04:00 PM	2	Key Concepts and Terminology
	04:00 PM – 05:00 PM	3	The Data Science Process: From Data Collection to Insight
12.12.2023	02:00 PM – 03:00 PM	4	Module 2: Data Collection and Preprocessing Data Sources and Collection Methods
	03:00 PM – 04:00 PM	5	Data Cleaning and Transformation
	04:00 PM – 05:00 PM	6	Handling Missing Values and Outliers
13.12.2023	02:00 PM – 03:00 PM	7	Module 3: Statistical Analysis and Data Exploration Descriptive Statistics and Data Summarization
	03:00 PM – 04:00 PM	8	Exploratory Data Analysis (EDA)
	04:00 PM – 05:00 PM	9	Statistical Inference and Hypothesis Testing
14.12.2023	02:00 PM – 03:00 PM	10	Module 4: Introduction to Big Data Technologies Overview of Big Data Concepts
	03:00 PM – 04:00 PM	11	Big Data Ecosystem (Hadoop, Spark)
	04:00 PM – 05:00 PM	12	Data Storage Solutions (NoSQL Databases)
15.12.2023	02:00 PM – 03:00 PM	13	Module 5: Data Visualization Techniques Principles of Data Visualization
	03:00 PM – 04:00 PM	14	Tools and Libraries (Tableau, Matplotlib, Seaborn)
	04:00 PM – 05:00 PM	15	Creating Effective Visualizations and Dashboards

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

Date	Time	No.	Topic
16.12.2023	02:00 PM – 03:00 PM	16	Module 6: Machine Learning Basics Introduction to Machine Learning
	03:00 PM – 04:00 PM	17	Supervised vs. Unsupervised Learning
	04:00 PM – 05:00 PM	18	Model Evaluation and Validation
18.12.2023	02:00 PM – 03:00 PM	19	Module 7: Supervised Learning Algorithms Regression Techniques (Linear, Logistic)
	03:00 PM – 04:00 PM	20	Classification Techniques (Decision Trees, SVM, K-Nearest Neighbors)
	04:00 PM – 05:00 PM	21	Model Tuning and Optimization
19.12.2023	02:00 PM – 03:00 PM	22	Module 8: Unsupervised Learning and Clustering Clustering Algorithms (K-Means, Hierarchical)
	03:00 PM – 04:00 PM	23	Dimensionality Reduction Techniques (PCA, t-SNE)
	04:00 PM – 05:00 PM	24	Anomaly Detection
20.12.2023	02:00 PM – 03:00 PM	25	Module 9: Big Data Processing with Spark Introduction to Apache Spark
	03:00 PM – 04:00 PM	26	Data Processing and Transformation with Spark
	04:00 PM – 05:00 PM	27	Working with Spark MLlib for Machine Learning
21.12.2023	02:00 PM – 03:00 PM	28	Module 10: Capstone Project and Case Studies Application of Data Science and Big Data Techniques to Real-World Problems
	03:00 PM – 04:00 PM	29	Group Projects: Analyzing Large Datasets and Presenting Insights Case Studies of Successful Data Science Projects
	04:00 PM – 05:00 PM	30	Final Exam

HOD
Dept. of Computer Applications
Aurora's P.G College, Uppal

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

1.2.1. Certificate/Value Added Courses

Timetables

7. Certificate Program on Start-Up Marketing

AURORA'S PG COLLEGE (MCA)
Peerzadiguda, Uppal, Hyderabad-500092

Certificate Program on Start-Up Marketing
Organized by Department of Business Administration

Duration: 22.01.2024 to 31.01.2024

Time Table

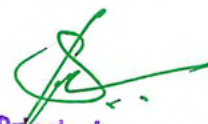| Day	Time	Session	Topic
22.01.2024	02:00 PM – 03:00 PM	1	Module 1: Introduction to Start-Up Marketing and Sales Understand the unique challenges and opportunities in marketing and sales for start-ups.
	03:00 PM – 04:00 PM	2	Overview of fundamental marketing and sales concepts relevant to start-ups. Explore the roles and responsibilities of marketing and sales professionals in start-ups
	04:00 PM – 05:00 PM	3	Module 2: Market Research and Analysis Learn techniques for conducting market research and analyzing market trends.
23.01.2024	02:00 PM – 03:00 PM	4	Identify target audiences and understand customer needs and preferences.
	03:00 PM – 04:00 PM	5	Use market analysis to inform marketing and sales strategies.
	04:00 PM – 05:00 PM	6	Module 3: Developing a Marketing Plan Create a detailed marketing plan including goals, strategies, and tactics.
24.01.2024	02:00 PM – 03:00 PM	7	Develop a value proposition and positioning strategy for the start-up. Establish a marketing budget and resource allocation plan.
	03:00 PM – 04:00 PM	8	Module 4: Sales Strategies and Techniques Develop and implement a sales process from lead generation to closing.
	04:00 PM – 05:00 PM	9	Explore various sales techniques, including consultative selling and solution-based selling.
25.01.2024	02:00 PM – 03:00 PM	10	Use CRM tools and technologies to manage customer relationships and track sales performance.
	03:00 PM – 04:00 PM	11	Module 5: Digital Marketing Fundamentals Understand key digital marketing channels such as social media, SEO, and content marketing.
	04:00 PM – 05:00 PM	12	Implement digital marketing strategies to increase online visibility and engagement. Analyze digital marketing metrics and adjust strategies based on performance.
27.01.2024	02:00 PM – 03:00 PM	13	Module 6: Branding and Positioning Develop a brand identity including brand name, logo, and messaging.
	03:00 PM – 04:00 PM	14	Create and maintain a consistent brand image across all marketing and sales channels. Position the brand effectively in the market to differentiate from competitors.
	04:00 PM – 05:00 PM	15	Module 7: Content Marketing and Social Media Create engaging content that attracts and retains customers.

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

29.01.2024	02:00 PM – 03:00 PM	16	Develop and execute a social media strategy to enhance brand presence and customer engagement. Measure and optimize content marketing and social media performance.
	03:00 PM – 04:00 PM	17	Module 8: Sales and Marketing Integration Align sales and marketing efforts to create a cohesive approach to customer acquisition and retention.
	04:00 PM – 05:00 PM	18	Develop strategies for cross-departmental collaboration and communication. Implement integrated marketing and sales campaigns to drive growth.
30.01.2024	02:00 PM – 03:00 PM	19	Module 9: Evaluating Marketing Campaigns Set key performance indicators (KPIs) to measure the effectiveness of marketing campaigns.
	03:00 PM – 04:00 PM	20	Analyze campaign results and ROI to determine success and areas for improvement.
	04:00 PM – 05:00 PM	21	Adjust strategies based on campaign performance data.
31.01.2024	02:00 PM – 03:00 PM	22	Module 10: Scaling and Growth Strategies Develop strategies for scaling marketing and sales efforts as the start-up grows.
	03:00 PM – 04:00 PM	23	Explore advanced marketing techniques and tools to support growth. Plan for long-term sustainability and expansion in the market.
	04:00 PM – 05:00 PM	24	Final Exam

HOD
Dept. of Business Management
Aurora's P.G College, Uppal

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

1.2.1. Certificate/Value Added Courses

Timetables

8. Certificate Program on AI and ML in Business

AURORA'S PG COLLEGE (MCA)
Peerzadiguda, Uppal, Hyderabad-500092

Certificate Program on AI and ML in Business
Organized by Department of Computer Applications
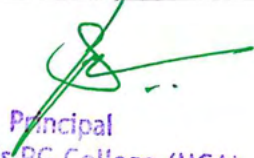
Duration: 05.02.2024 to 17.02.2024

Time Table

Day	Time	Session	Topic
05.02.2024	02:00 PM – 03:00 PM	1	Module 1: Introduction to AI and Machine Learning Overview of AI and ML Key Concepts and Terminology
	03:00 PM – 04:00 PM	2	Historical Development and Future Trends
	04:00 PM – 05:00 PM	3	Historical Development and Future Trends
06.02.2024	02:00 PM – 03:00 PM	4	Module 2: Data Handling and Preprocessing Importance of Data in AI and ML
	03:00 PM – 04:00 PM	5	Data Collection and Cleaning
	04:00 PM – 05:00 PM	6	Feature Selection and Engineering
07.02.2024	02:00 PM – 03:00 PM	7	Module 3: Machine Learning Algorithms Supervised Learning (Regression, Classification)
	03:00 PM – 04:00 PM	8	Unsupervised Learning
	04:00 PM – 05:00 PM	9	Reinforcement Learning Basics
08.02.2024	02:00 PM – 03:00 PM	10	Module 4: AI and ML Tools and Frameworks Introduction to Popular Tools
	03:00 PM – 04:00 PM	11	Hands-on Practice with AI/ML Frameworks
	04:00 PM – 05:00 PM	12	Model Training and Evaluation
09.02.2024	02:00 PM – 03:00 PM	13	Module 5: AI Applications in Business Marketing (Customer Segmentation, Predictive Analytics)
	03:00 PM – 04:00 PM	14	Finance (Fraud Detection, Algorithmic Trading)
	04:00 PM – 05:00 PM	15	Operations (Supply Chain Optimization, Predictive Maintenance)

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

Date	Time	No.	Topic
12.02.2024	02:00 PM – 03:00 PM	16	Module 6: Implementing AI Solutions Workflow from Data Collection to Deployment
	03:00 PM – 04:00 PM	17	Building and Training Models
	04:00 PM – 05:00 PM	18	Integrating AI Solutions into Business Systems
13.02.2024	02:00 PM – 03:00 PM	19	Module 7: Evaluating AI Impact on Business Measuring ROI of AI Investments
	03:00 PM – 04:00 PM	20	Case Studies of Successful AI Implementations
	04:00 PM – 05:00 PM	21	Analyzing the Strategic Implications of AI
14.02.2024	02:00 PM – 03:00 PM	22	Module 8: Ethical and Practical Considerations Data Privacy and Security
	03:00 PM – 04:00 PM	23	Bias and Fairness in AI Models
	04:00 PM – 05:00 PM	24	Transparency and Explain ability
15.02.2024	02:00 PM – 03:00 PM	25	Module 9: AI Strategy and Governance Developing an AI Strategy for Business
	03:00 PM – 04:00 PM	26	Governance and Management of AI Projects
	04:00 PM – 05:00 PM	27	Compliance with Regulations and Standards
16.02.2024	02:00 PM – 03:00 PM	28	Module 10: Case Studies and Practical Applications In-depth Analysis of Real-World AI and ML Business Applications
	03:00 PM – 04:00 PM	29	Group Projects: Designing and Implementing AI Solutions
	04:00 PM – 05:00 PM	30	Presentations and Discussions on Project Outcomes
17.02.2024	03:00 PM – 04:00 PM	31	Final Exam

HOD
Dept. of Computer Applications
Aurora's P.G College, Uppal

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

1.2.1. Certificate/Value Added Courses

Timetables

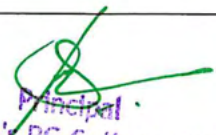## 9. Training Program on IT Fundamentals

Training Program on IT Fundamentals
Organized by Department of Business Administration in association with ExcelR

Duration: 05.02.2024 to 17.02.2024
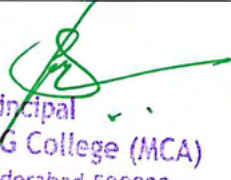
Time Table

Day	Time	Session	Topic
05.02.2024	02:00 PM – 03:00 PM	1	Module 1: Introduction to Information Technology Overview of IT
	03:00 PM – 04:00 PM	2	Key Concepts and Terminology
	04:00 PM – 05:00 PM	3	The Role of IT in Modern Organizations
06.02.2024	02:00 PM – 03:00 PM	4	Module 2: Computer Hardware Basics Components of a Computer System (CPU, RAM, Storage, Peripherals)
	03:00 PM – 04:00 PM	5	Function and Purpose of Each Component Hardware Installation and Maintenance
	04:00 PM – 05:00 PM	6	Module 3: Operating Systems
07.02.2024	02:00 PM – 03:00 PM	7	Introduction to Operating Systems (Windows, macOS, Linux)
	03:00 PM – 04:00 PM	8	Basic Functions and Features
	04:00 PM – 05:00 PM	9	File Management and System Configuration
08.02.2024	02:00 PM – 03:00 PM	10	Module 4: Software Applications
	03:00 PM – 04:00 PM	11	Common Software Applications (Productivity Tools, Web Browsers)
	04:00 PM – 05:00 PM	12	Installation and Management of Software
09.02.2024	02:00 PM – 03:00 PM	13	Understanding Software Licenses and Updates
	03:00 PM – 04:00 PM	14	Module 5: Networking Fundamentals
	04:00 PM – 05:00 PM	15	Basics of Networking (LAN, WAN, Internet)

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

12.02.2024	02:00 PM – 03:00 PM	16	Common Network Components (Routers, Switches, Modems)
	03:00 PM – 04:00 PM	17	Introduction to Networking Protocols (TCP/IP, HTTP, FTP)
	04:00 PM – 05:00 PM	18	Basic Security Measures (Firewalls, Antivirus Software, Password Management)
13.02.2024	02:00 PM – 03:00 PM	19	Module 6: Cybersecurity Basics
	03:00 PM – 04:00 PM	20	Fundamental Cybersecurity Concepts
	04:00 PM – 05:00 PM	21	Common Threats and Vulnerabilities
14.02.2024	02:00 PM – 03:00 PM	22	Module 7: Troubleshooting Techniques Systematic Troubleshooting Approach
	03:00 PM – 04:00 PM	23	Diagnosing Common Hardware and Software Issues
	04:00 PM – 05:00 PM	24	Using Diagnostic Tools and Utilities
15.02.2024	02:00 PM – 03:00 PM	25	Module 8: IT Support and Services Understanding IT Support Roles and Responsibilities
	03:00 PM – 04:00 PM	26	Service Desk Operations and Best Practices
	04:00 PM – 05:00 PM	27	Common IT Support Scenarios and Solutions
16.02.2024	02:00 PM – 03:00 PM	28	Module 9: Emerging Technologies and Trends Introduction to Emerging Technologies (Cloud Computing, IoT)
	03:00 PM – 04:00 PM	29	Current IT Trends and Innovations
	04:00 PM – 05:00 PM	30	Impact of Emerging Technologies on the IT Field
17.02.2024	02:00 PM – 03:00 PM	31	Module 10: Review and Practical Applications Recap of Key Concepts
	03:00 PM – 04:00 PM	32	Practical Exercises and Case Studies Preparing for Further IT Studies and Certifications
	04:00 PM – 05:00 PM	33	Final Exam

HOD
Dept. of Business Management
Aurora's P.G College, Uppal

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

1.2.1. Certificate/Value Added Courses

Timetables

10. Training Program on Django

AURORA'S PG COLLEGE (MCA)
Peerzadiguda, Uppal, Hyderabad-500092

Training Program on Django

Organized by Department of Computer Applications in association with YBI Foundation

Duration: 15.04.2024 to 26.04.2024

Time Table

Day	Time	Session	Topic
15.04.2024	02:00 PM – 03:00 PM	1	Module 1: Introduction to Django Overview of Django Framework
	03:00 PM – 04:00 PM	2	Key Features and Benefits
	04:00 PM – 05:00 PM	3	Setting Up the Development Environment
16.04.2024	02:00 PM – 03:00 PM	4	Module 2: Django Project Structure Understanding Django's Project and App Architecture
	03:00 PM – 04:00 PM	5	Creating and configuring a Django Project
	04:00 PM – 05:00 PM	6	Overview of Django's File Structure
18.04.2024	02:00 PM – 03:00 PM	7	Module 3: Models and Databases Introduction to Django Models
	03:00 PM – 04:00 PM	8	Defining Models and Fields
	04:00 PM – 05:00 PM	9	Django's ORM and Database Migrations Performing CRUD Operations
19.04.2024	02:00 PM – 03:00 PM	10	Module 4: Views and URL Routing Introduction to Django Views
	03:00 PM – 04:00 PM	11	Function-Based vs. Class-Based Views
	04:00 PM – 05:00 PM	12	URL Routing and Configuration Handling Requests and Responses
20.04.2024	02:00 PM – 03:00 PM	13	Module 5: Templates and Static Files Introduction to Django Templates
	03:00 PM – 04:00 PM	14	Template Inheritance and Filters
	04:00 PM – 05:00 PM	15	Working with Static Files (CSS, JavaScript, Images) Creating Responsive Web Interfaces

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

22.04.2024	02:00 PM – 03:00 PM	16	Module 6: Forms and User Input Handling Forms in Django
	03:00 PM – 04:00 PM	17	Validating and Processing User Input
	04:00 PM – 05:00 PM	18	Using Django Forms and ModelForms Managing Form Data and Error Handling
23.04.2024	02:00 PM – 03:00 PM	19	Module 7: Authentication and Authorization User Authentication and Registration
	03:00 PM – 04:00 PM	20	Managing User Accounts and Sessions
	04:00 PM – 05:00 PM	21	Implementing Permissions and Access Control Customizing the Authentication System
24.04.2024	02:00 PM – 03:00 PM	22	Module 8: Django Admin Interface Introduction to Django's Admin Interface
	03:00 PM – 04:00 PM	23	Customizing the Admin Dashboard
	04:00 PM – 05:00 PM	24	Managing Models and Data through the Admin Extending and Enhancing Admin Functionality
25.04.2024	02:00 PM – 03:00 PM	25	Module 9: Testing and Debugging Writing and Running Tests in Django
	03:00 PM – 04:00 PM	26	Debugging Common Issues
	04:00 PM – 05:00 PM	27	Using Django Debug Toolbar Best Practices for Testing and Debugging
26.04.2024	02:00 PM – 03:00 PM	28	Module 10: Deployment and Maintenance Preparing a Django Application for Production Deploying to Popular Platforms
	03:00 PM – 04:00 PM	29	Configuring Web Servers and Databases Post-Deployment Maintenance and Monitoring
	04:00 PM – 05:00 PM	30	Final Exam

HOD
Dept. of Computer Applications
Aurora's P.G College, Uppal

Principal
Aurora's P.G College (MCA)
Uppal, Hyderabad-500092

1.2.1. Certificate/Value Added Courses

Timetables

11. Certificate Program on Leadership Development

AURORA'S PG COLLEGE (MCA)
Peerzadiguda, Uppal, Hyderabad-500092

Certificate Program on Leadership Development
Organized by Department of Business Administration

Duration: 15.04.2024 to 26.04.2024

Time Table

Day	Time	Session	Topic
15.04.2024	02:00 PM – 03:00 PM	1	Module 1: Introduction to Leadership Definitions and Importance of Leadership Overview of Leadership Theories (Trait, Behavioral, Transformational, Transactional)
	03:00 PM – 04:00 PM	2	Overview of Leadership Theories (Trait, Behavioral, Transformational, Transactional)
	04:00 PM – 05:00 PM	3	The Role of a Leader in Modern Organizations
16.04.2024	02:00 PM – 03:00 PM	4	Module 2: Self-Awareness and Personal Leadership Understanding Emotional Intelligence Self-Assessment Tools and Techniques (e.g., 360-Degree Feedback, MBTI) Plan
	03:00 PM – 04:00 PM	5	Self-Assessment Tools and Techniques
	04:00 PM – 05:00 PM	6	Developing a Personal Leadership Development
18.04.2024	02:00 PM – 03:00 PM	7	Module 3: Strategic Thinking and Decision Making Principles of Strategic Thinking
	03:00 PM – 04:00 PM	8	Decision-Making Models and Frameworks
	04:00 PM – 05:00 PM	9	Case Studies in Strategic Leadership
19.04.2024	02:00 PM – 03:00 PM	10	Module 4: Leadership Styles and Approaches Exploring Different Leadership Styles (Autocratic, Democratic, Laissez-Faire)
	03:00 PM – 04:00 PM	11	Adaptive Leadership and Situational Leadership
	04:00 PM – 05:00 PM	12	Applying Leadership Styles in Various Contexts
20.04.2024	02:00 PM – 03:00 PM	13	Module 5: Effective Communication and Influence Techniques for Effective Communication
	03:00 PM – 04:00 PM	14	Building Trust and Credibility
	04:00 PM –	15	Strategies for Persuasion and Influence

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

Date	Time	No.	Topic
	05:00 PM		
22.04.2024	02:00 PM – 03:00 PM	16	Module 6: Team Management and Development Principles of Team Building and Dynamics
	03:00 PM – 04:00 PM	17	Strategies for Managing and Motivating Teams
	04:00 PM – 05:00 PM	18	Conflict Resolution and Problem-Solving Techniques
23.04.2024	02:00 PM – 03:00 PM	19	Module 7: Change Management and Innovation Leading Organizational Change
	03:00 PM – 04:00 PM	20	Strategies for Managing Resistance to Change
	04:00 PM – 05:00 PM	21	Fostering a Culture of Innovation and Continuous Improvement
24.04.2024	02:00 PM – 03:00 PM	22	Module 8: Leading in Diverse and Global Environments Understanding Diversity and Inclusion
	03:00 PM – 04:00 PM	23	Leading Cross-Cultural Teams
	04:00 PM – 05:00 PM	24	Global Leadership Challenges and Strategies
25.04.2024	02:00 PM – 03:00 PM	25	Module 9: Ethical Leadership and Corporate Social Responsibility Principles of Ethical Leadership
	03:00 PM – 04:00 PM	26	Integrating Corporate Social Responsibility into Leadership Practices
	04:00 PM – 05:00 PM	27	Case Studies on Ethical Dilemmas in Leadership
26.04.2024	02:00 PM – 03:00 PM	28	Module 10: Leadership Development and Future Trends Emerging Trends in Leadership (e.g., Digital Leadership, Remote Leadership)
	03:00 PM – 04:00 PM	29	Developing Long-Term Leadership Skills Final Project: Leadership Case Study and Presentation
	04:00 PM – 05:00 PM	30	Final Exam

HOD
Dept. of Business Management
Aurora's P.G College, Uppal

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

1.2.1. Certificate/Value Added Courses

Timetables

12. Certificate Program on Entrepreneurial Strategic Management

AURORA'S PG COLLEGE (MCA)
Peerzadiguda, Uppal, Hyderabad-500092

Certificate Program on Entrepreneurial Strategic Management
Organized by Department of Business Administration
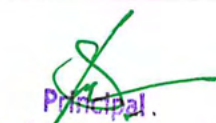
Duration: 06.05.2024 to 17.05.2024

Time Table

Day	Time	Session	Topic
06.05.2024	02:00 PM – 03:00 PM	1	Overview of Strategic Management: Definitions, key concepts, and importance in business.
	03:00 PM – 04:00 PM	2	Entrepreneurial Context: Unique aspects of strategic management in startups vs. established firms.
	04:00 PM – 05:00 PM	3	Strategic Management Process: Stages from strategy formulation to implementation
07.05.2024	02:00 PM – 03:00 PM	4	Crafting Vision and Mission Statements: Techniques and best practices for developing vision and mission.
	03:00 PM – 04:00 PM	5	Aligning Strategic Objectives: Setting SMART (Specific, Measurable, Achievable, Relevant, Time-bound) goals.
	04:00 PM – 05:00 PM	6	Case Studies: Analysis of successful and failed visions and missions.
08.05.2024	02:00 PM – 03:00 PM	7	Conducting SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis.
	03:00 PM – 04:00 PM	8	External Analysis: PESTEL (Political, Economic, Social, Technological, Environmental, Legal) analysis.
	04:00 PM – 05:00 PM	9	Competitive Analysis: Using tools like Porter's Five Forces to understand competitive dynamics.
09.05.2024	02:00 PM – 03:00 PM	10	Designing Business Models: Components and types of business models.
	03:00 PM – 04:00 PM	11	Business Model Canvas: Practical application of the Business Model Canvas tool.
	04:00 PM – 05:00 PM	12	Innovative Business Models: Exploring disruptive and innovative business models in entrepreneurship.
10.05.2024	02:00 PM – 03:00 PM	13	Strategic Planning Frameworks: Introduction to frameworks such as the BCG Matrix, Ansoff Matrix, and Blue Ocean Strategy.
	03:00 PM – 04:00 PM	14	Formulating Strategies: Techniques for developing competitive and growth strategies.
	04:00 PM – 05:00 PM	15	Scenario Planning: Preparing for various future scenarios and their impact on strategy.

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

13.05.2024	02:00 PM – 03:00 PM	16	Developing Competitive Strategies: Differentiation, cost leadership, and focus strategies.
	03:00 PM – 04:00 PM	17	Market Positioning: Strategies for positioning a startup in the market.
	04:00 PM – 05:00 PM	18	Competitive Advantage: Building and sustaining competitive advantages in a dynamic market.
14.05.2024	02:00 PM – 03:00 PM	19	Implementing Strategies: Steps and best practices for effective strategy implementation.
	03:00 PM – 04:00 PM	20	Organizational Structure: Aligning structure with strategy.
	04:00 PM – 05:00 PM	21	Change Management: Techniques for managing change and overcoming resistance.
15.05.2024	02:00 PM – 03:00 PM	22	Performance Metrics: Identifying key performance indicators (KPIs) for startups.
	03:00 PM – 04:00 PM	23	Strategic Control Systems: Tools for monitoring and evaluating strategic performance.
	04:00 PM – 05:00 PM	24	Continuous Improvement: Using feedback and performance data to refine strategies.
16.05.2024	02:00 PM – 03:00 PM	25	Strategies for Growth: Approaches to scaling a business, including market expansion and diversification.
	03:00 PM – 04:00 PM	26	Growth Challenges: Addressing common challenges faced during scaling.
	04:00 PM – 05:00 PM	27	Case Studies: Examining real-world examples of successful and unsuccessful growth strategies.
17.05.2024	02:00 PM – 03:00 PM	28	Identifying Strategic Risks: Types of risks (financial, operational, market, etc.) and their impact.
	03:00 PM – 04:00 PM	29	Risk Mitigation Strategies: Techniques for managing and mitigating risks. Strategic Flexibility: Adapting strategies in response to changing conditions and uncertainties.
	04:00 PM – 05:00 PM	30	Final Exam

HOD
Dept. of Business Management
Aurora's P.G College, Uppal

Principal.
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

1.2.1. Certificate/Value Added Courses

Timetables

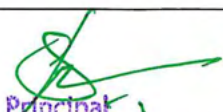## 13. Certificate Program on Investment Risk Management

Certificate Program on Investment Risk Management
Organized by Department of Business Administration
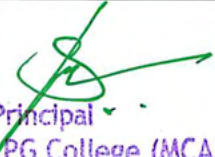
Duration: 01.08.2022 to 12.08.2022

Time Table

Day	Time	Session	Topic
01.08.2022	02:00 PM – 03:00 PM	1	Module 1: Introduction to Investment Risk Management Overview of Risk Management in Investments
	03:00 PM – 04:00 PM	2	Key Concepts, Terminology, and Importance
	04:00 PM – 05:00 PM	3	Types of Investment Risks: An Overview
02.08.2022	02:00 PM – 03:00 PM	4	Module 2: Risk Identification and Classification Detailed Analysis of Market Risk: Equity, Interest Rate, Currency
	03:00 PM – 04:00 PM	5	Credit Risk: Default Risk, Counterparty Risk Liquidity Risk: Funding Liquidity, Market Liquidity
	04:00 PM – 05:00 PM	6	Operational Risk: Internal Processes, Human Factors, and Systems Risks
03.08.2022	02:00 PM – 03:00 PM	7	Module 3: Quantitative Risk Assessment Techniques Statistical Methods for Risk Measurement: Standard Deviation, Variance
	03:00 PM – 04:00 PM	8	Value at Risk (VaR): Calculation Methods and Applications
	04:00 PM – 05:00 PM	9	Stress Testing and Scenario Analysis
04.08.2022	02:00 PM – 03:00 PM	10	Module 4: Qualitative Risk Assessment Methods Scenario Planning and Analysis
	03:00 PM – 04:00 PM	11	Risk Mapping and Risk Categorization
	04:00 PM – 05:00 PM	12	Expert Judgment and Delphi Method
05.08.2022	02:00 PM – 03:00 PM	13	Module 5: Risk Management Strategies Diversification: Theory and Practice
	03:00 PM – 04:00 PM	14	Hedging Techniques: Options, Futures, Swaps
	04:00 PM – 05:00 PM	15	Asset Allocation: Strategic vs. Tactical Approaches

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

06.08.2022	02:00 PM – 03:00 PM	16	Module 6: Advanced Risk Management Tools Risk Management Software and Platforms
	03:00 PM – 04:00 PM	17	Predictive Analytics and Machine Learning in Risk Management
	04:00 PM – 05:00 PM	18	Portfolio Management Tools: Optimization and Rebalancing
08.08.2022	02:00 PM – 03:00 PM	19	Module 7: Developing a Risk Management Framework Frameworks and Policies for Risk Management
	03:00 PM – 04:00 PM	20	Setting Risk Tolerance and Investment Objectives
	04:00 PM – 05:00 PM	21	Implementing and Monitoring Risk Management Plans
10.08.2022	02:00 PM – 03:00 PM	22	Module 8: Regulatory and Compliance Considerations Overview of Key Regulatory Bodies and Standards
	03:00 PM – 04:00 PM	23	Basel III, Dodd-Frank, and Other Regulations
	04:00 PM – 05:00 PM	24	Compliance Best Practices and Reporting Requirements
11.08.2022	02:00 PM – 03:00 PM	25	Module 9: Case Studies and Practical Applications In-depth Analysis of Real-World Case Studies
	03:00 PM – 04:00 PM	26	Simulation Exercises: Risk Management in Action
	04:00 PM – 05:00 PM	27	Group Projects: Developing Risk Management Strategies for Diverse Portfolios
12.08.2022	02:00 PM – 03:00 PM	28	Module 10: Future Trends and Emerging Challenges Innovations in Risk Management Technologies
	03:00 PM – 04:00 PM	29	Impact of Global Economic and Political Changes Sustainable Investing and ESG Risks Preparing for Future Risks and Opportunities
	04:00 PM – 05:00 PM	30	Final Exam

HOD
Dept. of Business Management
Aurora's P.G College, Uppal

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

1.2.1. Certificate/Value Added Courses

Timetables

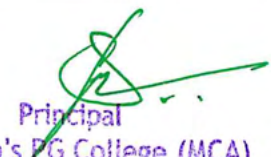## 14. Certificate Program on Python for IoT

Certificate Program on Python for IoT
Organized by Department of Computer Applications

Duration: 14.11.2022 to 22.11.2022

Time Table

Day	Time	Session	Topic
14.11.2022	02:00 PM – 03:00 PM	1	Module 1: Introduction to Python for IoT Review Python programming basics relevant to IoT, including variables, data types, and control structures.
	03:00 PM – 04:00 PM	2	Understand the role of Python in IoT development and its advantages.
	04:00 PM – 05:00 PM	3	Set up the development environment for Python IoT projects.
15.11.2022	02:00 PM – 03:00 PM	4	Module 2: Setting Up IoT Hardware Learn about common IoT hardware platforms such as Raspberry Pi and Arduino.
	03:00 PM – 04:00 PM	5	Connect and test basic sensors and actuators with Python.
	04:00 PM – 05:00 PM	6	Module 3: Interfacing Sensors with Python Understand the principles of sensor data acquisition.
16.11.2022	02:00 PM – 03:00 PM	7	Write Python scripts to read data from various sensors Process and visualize sensor data using Python libraries.
	03:00 PM – 04:00 PM	8	Module 4: Actuator Control with Python Learn how to control actuators such as motors and relays using Python.
	04:00 PM – 05:00 PM	9	Develop Python scripts to perform basic actuator operations. Integrate sensor inputs to control actuators dynamically
17.11.2022	02:00 PM – 03:00 PM	10	Module 5: IoT Communication Protocols Understand IoT communication protocols such as MQTT and HTTP.
	03:00 PM – 04:00 PM	11	Implement MQTT client and server functionality in Python.
	04:00 PM – 05:00 PM	12	Use HTTP for data transmission and interaction with IoT devices.

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

	02:00 PM – 03:00 PM	13	Module 6: Data Collection and Storage Develop Python applications for collecting and storing IoT data. Explore data storage options such as local files, databases, and cloud storage.
18.11.2022	03:00 PM – 04:00 PM	14	Implement data logging and retrieval mechanisms.
	04:00 PM – 05:00 PM	15	Module 7: Data Analysis and Visualization Use Python libraries to analyze and visualize IoT data.
	02:00 PM – 03:00 PM	16	Develop scripts for generating reports and dashboards based on collected data. Apply statistical and machine learning techniques to IoT data.
19.11.2022	03:00 PM – 04:00 PM	17	Module 8: IoT Security and Privacy Understand the key security and privacy concerns in IoT systems.
	04:00 PM – 05:00 PM	18	Implement basic security practices in Python applications for IoT. Explore encryption, authentication, and secure communication methods
	02:00 PM – 03:00 PM	19	Module 9: Building IoT Applications Design and develop a complete IoT application using Python.
21.11.2022	03:00 PM – 04:00 PM	20	Integrate hardware and software components to achieve desired functionality.
	04:00 PM – 05:00 PM	21	Test and debug IoT applications to ensure reliability and performance.
	02:00 PM – 03:00 PM	22	Module 10: Deployment and Scaling Learn strategies for deploying IoT applications in real-world environments.
22.11.2022	03:00 PM – 04:00 PM	23	Explore scaling options and manage multiple IoT devices. Develop a project showcasing the end-to-end deployment of an IoT solution.
	04:00 PM – 05:00 PM	24	Final Exam

HOD
Dept. of Computer Applications
Aurora's P.G College, Uppal

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

1.2.1. Certificate/Value Added Courses

Timetables

15. Bridge Course on Fundamentals of Statistics

Bridge Course on Fundamentals of Statistics

Organized by Department of Business Management

Duration: 14.11.2022 to 22.11.2022

Time Table

Day	Time	Session	Topic
14.11.2022	02:00 PM – 03:00 PM	1	Module 1: Introduction to Statistics Definition and Scope of Statistics
	03:00 PM – 04:00 PM	2	Types of Data: Qualitative vs. Quantitative Levels of Measurement: Nominal, Ordinal, Interval, Ratio
	04:00 PM – 05:00 PM	3	Module 2: Descriptive Statistics Measures of Central Tendency: Mean, Median, Mode
15.11.2022	02:00 PM – 03:00 PM	4	Measures of Dispersion: Range, Variance, Standard Deviation
	03:00 PM – 04:00 PM	5	Data Visualization: Histograms, Bar Charts, Box Plots
	04:00 PM – 05:00 PM	6	Module 3: Probability Basics Fundamental Concepts: Experiment, Sample Space, Events
16.11.2022	02:00 PM – 03:00 PM	7	Probability Rules: Addition and Multiplication Rules
	03:00 PM – 04:00 PM	8	Conditional Probability and Independence
	04:00 PM – 05:00 PM	9	Module 4: Probability Distributions Discrete Distributions: Binomial Distribution
17.11.2022	02:00 PM – 03:00 PM	10	Continuous Distributions: Normal Distribution Properties and Applications of Distributions
	03:00 PM – 04:00 PM	11	Module 5: Sampling and Sampling Distributions Types of Sampling Methods: Random, Stratified, Cluster
	04:00 PM – 05:00 PM	12	Sampling Distribution of the Sample Mean Central Limit Theorem
18.11.2022	02:00 PM – 03:00 PM	13	Module 6: Inferential Statistics Hypothesis Testing: Null and Alternative Hypotheses
	03:00 PM – 04:00 PM	14	Type I and Type II Errors Common Tests: t-Test, Chi-Square Test, ANOVA
	04:00 PM – 05:00 PM	15	Module 7: Correlation and Regression Understanding Correlation: Pearson's r

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

19.11.2022	02:00 PM – 03:00 PM	16	Simple Linear Regression: Model Fitting and Interpretation Multiple Regression Analysis
	03:00 PM – 04:00 PM	17	Module 8: Using Statistical Software Introduction to Statistical Software (e.g., R, SPSS, Excel)
	04:00 PM – 05:00 PM	18	Data Import and Cleaning Conducting Basic Statistical Analysis and Creating Visualizations
21.11.2022	02:00 PM – 03:00 PM	19	Module 9: Practical Applications and Case Studies Real-World Data Analysis Examples
	03:00 PM – 04:00 PM	20	Case Studies and Application of Statistical Methods
	04:00 PM – 05:00 PM	21	Interpretation of Results and Report Writing
22.11.2022	02:00 PM – 03:00 PM	22	Module 10: Review and Future Directions Recap of Key Concepts
	03:00 PM – 04:00 PM	23	Introduction to Advanced Topics in Statistics Resources for Continued Learning and Application
	04:00 PM – 05:00 PM	24	Final Exam

HOD
Dept. of Business Management
Aurora's P.G College, Uppal

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

1.2.1. Certificate/Value Added Courses

Timetables

16.Certificate Program on Ethical Hacking

AURORA'S PG COLLEGE (MCA)
Peerzadiguda , Uppal, Hyderabad-500092

Certificate Program on Ethical Hacking
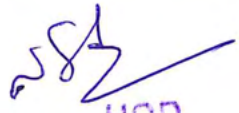Organized by Department of Computer Applications
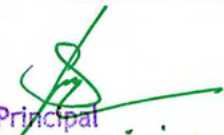
Duration: 19.12.2022 to 30.12.2022

Time Table

Day	Time	Session	Topic
19.12.2022	02:00 PM – 03:00 PM	1	Module 1: Introduction to Ethical Hacking and Penetration Testing Understand the concepts, goals, and scope of ethical hacking and penetration testing.
	03:00 PM – 04:00 PM	2	Explore the ethical and legal considerations involved in these practices
	04:00 PM – 05:00 PM	3	Overview of the various types of hacking and their implications
20.12.2022	02:00 PM – 03:00 PM	4	Module 2: Setting Up a Penetration Testing Environment Learn how to set up a secure and controlled environment for penetration testing.
	03:00 PM – 04:00 PM	5	Install and configure essential penetration testing tools and software.
	04:00 PM – 05:00 PM	6	Establish best practices for maintaining a secure testing environment.
21.12.2022	02:00 PM – 03:00 PM	7	Module 3: Information Gathering and Reconnaissance Master techniques for gathering information about targets, including footprinting and scanning.
	03:00 PM – 04:00 PM	8	Utilize tools and methods for network mapping, enumeration, and identifying potential vulnerabilities.
	04:00 PM – 05:00 PM	9	Analyze gathered data to plan further testing activities.
22.12.2022	02:00 PM – 03:00 PM	10	Module 4: Vulnerability Assessment Understand the process of identifying and assessing vulnerabilities in systems and applications.
	03:00 PM – 04:00 PM	11	Use vulnerability scanning tools to detect potential security issues.
	04:00 PM – 05:00 PM	12	Interpret vulnerability scan results and prioritize remediation efforts.
23.12.2022	02:00 PM – 03:00 PM	13	Module 5: Exploitation Techniques Learn various exploitation techniques to gain unauthorized access to systems.
	03:00 PM – 04:00 PM	14	Practice using tools and scripts to exploit vulnerabilities in a controlled environment.
	04:00 PM – 05:00 PM	15	Understand how to document and report exploitation methods and their impact.

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

24.12.2022	02:00 PM – 03:00 PM	16	**Module 6: Post-Exploitation and Persistence** Explore techniques for maintaining access and escalating privileges after initial exploitation.
	03:00 PM – 04:00 PM	17	Understand methods for covering tracks and avoiding detection.
	04:00 PM – 05:00 PM	18	Implement strategies for persistence and lateral movement within a compromised environment.
27.12.2022	02:00 PM – 03:00 PM	19	**Module 7: Web Application Security Testing** Learn the specific techniques for assessing the security of web applications.
	03:00 PM – 04:00 PM	20	Identify common web application vulnerabilities such as SQL injection, XSS, and CSRF.
	04:00 PM – 05:00 PM	21	Use tools and methodologies for web application penetration testing.
28.12.2022	02:00 PM – 03:00 PM	22	**Module 8: Network Security and Wireless Testing** Understand network security principles and common network vulnerabilities.
	03:00 PM – 04:00 PM	23	Perform network penetration testing and analyze network traffic for security weaknesses.
	04:00 PM – 05:00 PM	24	Test wireless networks for security issues and implement protective measures.
29.12.2022	02:00 PM – 03:00 PM	25	**Module 9: Reporting and Documentation** Develop skills for creating comprehensive penetration testing reports.
	03:00 PM – 04:00 PM	26	Learn to document findings, vulnerabilities, and remediation recommendations effectively.
	04:00 PM – 05:00 PM	27	Communicate results to stakeholders and provide actionable insights for improving security
30.12.2022	02:00 PM – 03:00 PM	28	**Module 10: Legal, Ethical, and Professional Issues** Study the legal frameworks and ethical considerations related to ethical hacking and penetration testing.
	03:00 PM – 04:00 PM	29	Understand the responsibilities and professional conduct required in the field. Explore career paths, certifications, and continuous learning opportunities in ethical hacking and cyber security.
	04:00 PM – 05:00 PM	30	Final Exam

HOD
Dept. of Computer Applications
Aurora's P.G College, Uppal

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

1.2.1. Certificate/Value Added Courses

Timetables

17.Training Program on Digital Tools for Business

AURORA'S PG COLLEGE (MCA)
Peerzadiguda , Uppal, Hyderabad-500092

Training Program on Digital Tools for Business
Organized by Department of Business Management
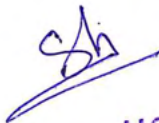
Duration: 22.12.2022 to 31.12.2022

Time Table

Day	Time	Session	Topic
22.12.2022	02:00 PM – 03:00 PM	1	Module 1: Introduction to Digital Tools in Business Overview of digital transformation
	03:00 PM – 04:00 PM	2	Importance of digital tools in modern business
	04:00 PM – 05:00 PM	3	Key categories of digital tools
23.12.2022	02:00 PM – 03:00 PM	4	Module 2: Project Management Software Introduction to project management tools (e.g., Trello, Asana, MS Project)
	03:00 PM – 04:00 PM	5	Planning, scheduling, and tracking projects
	04:00 PM – 05:00 PM	6	Collaboration features and team management
24.12.2022	02:00 PM – 03:00 PM	7	Module 3: Collaboration and Communication Tools Overview of collaboration platforms (e.g., Slack, Microsoft Teams, Zoom)
	03:00 PM – 04:00 PM	8	Best practices for remote communication and teamwork Document sharing and version control
	04:00 PM – 05:00 PM	9	Module 4: Data Analytics Tools Introduction to data analysis software (e.g., Excel, Tableau, Google Analytics)
27.12.2022	02:00 PM – 03:00 PM	10	Data collection and preparation techniques Visualization and interpretation of data insights
	03:00 PM – 04:00 PM	11	Module 5: Digital Marketing Tools Overview of digital marketing platforms (e.g., HubSpot, Mailchimp, Hootsuite)
	04:00 PM – 05:00 PM	12	Strategies for content marketing, social media, and email campaigns
28.12.2022	02:00 PM – 03:00 PM	13	Measuring marketing effectiveness through analytics
	03:00 PM – 04:00 PM	14	Module 6: Customer Relationship Management (CRM) Software Introduction to CRM systems (e.g., Salesforce, Zoho CRM)
	04:00 PM – 05:00 PM	15	Managing customer interactions and sales processes Analyzing customer data to enhance service delivery

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

29.12.2022	02:00 PM – 03:00 PM	16	Module 7: Cybersecurity for Digital Tools Understanding cybersecurity fundamentals
	03:00 PM – 04:00 PM	17	Best practices for protecting digital assets Compliance and regulatory considerations
	04:00 PM – 05:00 PM	18	Module 8: E-commerce and Online Business Tools Overview of e-commerce platforms (e.g., Shopify, WooCommerce)
30.12.2022	02:00 PM – 03:00 PM	19	Payment processing and inventory management Strategies for online customer engagement
	03:00 PM – 04:00 PM	20	Module 9: Emerging Technologies in Business Exploring the impact of AI, machine learning, and automation
	04:00 PM – 05:00 PM	21	Assessing the potential of blockchain and IoT in business Future trends in digital tools
31.12.2022	02:00 PM – 03:00 PM	22	Module 10: Strategic Implementation of Digital Tools Creating a digital tool implementation plan
	03:00 PM – 04:00 PM	23	Change management strategies for tool adoption Presenting and communicating the implementation plan to stakeholders
	04:00 PM – 05:00 PM	24	Final Exam

HOD
Dept. of Business Management
Aurora's P.G College, Uppal

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

1.2.1. Certificate/Value Added Courses

Timetables

18.Certificate Program on Financial Modeling

AURORA'S PG COLLEGE (MCA)
Peerzadiguda, Uppal, Hyderabad-500092

Certificate Program on Financial Modeling
Organized by Department of Business Administration
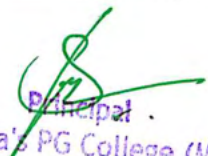
Duration: 23.01.2023 to 03.02.2023

Time Table

Day	Time	Session	Topic
23.01.2023	02:00 PM – 03:00 PM	1	Module 1: Introduction to Financial Modeling Overview of financial modeling principles and applications
	03:00 PM – 04:00 PM	2	Key components of financial models: Inputs, calculations, outputs
	04:00 PM – 05:00 PM	3	Introduction to modeling tools and software
24.01.2023	02:00 PM – 03:00 PM	4	Module 2: Constructing Financial Statements Building and linking the Income Statement, Balance Sheet, and Cash Flow Statement
	03:00 PM – 04:00 PM	5	Understanding financial statement interrelationships
	04:00 PM – 05:00 PM	6	Ensuring accuracy and consistency in financial statements
25.01.2023	02:00 PM – 03:00 PM	7	Module 3: Revenue and Expense Forecasting Techniques for projecting revenues based on historical data and market trends
	03:00 PM – 04:00 PM	8	Methods for forecasting expenses and understanding cost structures
	04:00 PM – 05:00 PM	9	Incorporating assumptions into financial forecasts
27.01.2023	02:00 PM – 03:00 PM	10	Module 4: Valuation Models and Techniques Discounted Cash Flow (DCF) Analysis: Components and methodology
	03:00 PM – 04:00 PM	11	Comparable Company Analysis: Using market multiples for valuation
	04:00 PM – 05:00 PM	12	Precedent Transactions: Applying historical transaction data
28.01.2023	02:00 PM – 03:00 PM	13	Module 5: Scenario and Sensitivity Analysis Implementing scenario analysis to evaluate different business conditions
	03:00 PM – 04:00 PM	14	Conducting sensitivity analysis to assess the impact of changing assumptions
	04:00 PM – 05:00 PM	15	Utilizing Excel tools like data tables and Scenario Manager
30.01.2023	02:00 PM – 03:00 PM	16	Module 6: Risk Assessment and Management Identifying and assessing various financial risks
	03:00 PM – 04:00 PM	17	Incorporating risk factors into financial models
	04:00 PM – 05:00 PM	18	Techniques for stress testing and Monte Carlo simulations

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

31.01.2023	02:00 PM – 03:00 PM	19	Module 7: Advanced Excel Techniques Advanced Excel functions: VLOOKUP, HLOOKUP, INDEX, MATCH, OFFSET
	03:00 PM – 04:00 PM	20	Building dynamic models with data validation and interactive features
	04:00 PM – 05:00 PM	21	Creating financial dashboards and visualizing data
01.02.2023	02:00 PM – 03:00 PM	22	Module 8: Model Structuring and Best Practices Structuring models for clarity and efficiency
	03:00 PM – 04:00 PM	23	Best practices for model design and organization
	04:00 PM – 05:00 PM	24	Documenting assumptions, formulas, and sources for transparency
02.02.2023	02:00 PM – 03:00 PM	25	Module 9: Case Studies in Financial Modeling Analyzing and building models based on real-world case studies
	03:00 PM – 04:00 PM	26	Group projects focusing on different industries and scenarios Reviewing lessons from successful and unsuccessful financial models
	04:00 PM – 05:00 PM	27	Module 10: Future Trends and Advanced Topics Emerging trends in financial modeling and technology (e.g., AI, machine learning)
03.02.2023	02:00 PM – 03:00 PM	28	Integration with ERP systems and advanced financial systems
	03:00 PM – 04:00 PM	29	Preparing for complex modeling topics such as derivative pricing and corporate financial strategy
	04:00 PM – 05:00 PM	30	Final Exam

HOD
Dept. of Business Management
Aurora's P.G College, Uppal

Principal .
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

1.2.1. Certificate/Value Added Courses

Timetables

19. Bridge Course on Fundamentals of Programming

AURORA'S PG COLLEGE (MCA)
Peerzadiguda, Uppal, Hyderabad-500092

Bridge Course on Fundamentals of Programming
Organized by Department of Computer Applications

Duration: 23.01.2023 to 03.02.2023

Time Table

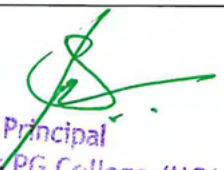| Day	Time	Session	Topic
23.01.2023	02:00 PM – 03:00 PM	1	Module 1: Introduction to Programming Overview of Programming Languages
	03:00 PM – 04:00 PM	2	Introduction to Basic Syntax and Structure
	04:00 PM – 05:00 PM	3	Setting Up the Programming Environment
24.01.2023	02:00 PM – 03:00 PM	4	Module 2: Variables and Data Types Understanding Variables and Constants
	03:00 PM – 04:00 PM	5	Primitive Data Types: Integers, Floats, Characters, and Booleans
	04:00 PM – 05:00 PM	6	Type Conversion and Type Casting
25.01.2023	02:00 PM – 03:00 PM	7	Module 3: Operators and Expressions Arithmetic Operators
	03:00 PM – 04:00 PM	8	Relational and Logical Operators
	04:00 PM – 05:00 PM	9	Expression Evaluation and Precedence
27.01.2023	02:00 PM – 03:00 PM	10	Module 4: Control Structures Conditional Statements
	03:00 PM – 04:00 PM	11	Looping Constructs
	04:00 PM – 05:00 PM	12	Nested Loops and Conditional Statements
28.01.2023	02:00 PM – 03:00 PM	13	Module 5: Functions and Modular Programming Defining and Calling Functions
	03:00 PM – 04:00 PM	14	Function Parameters and Return Values
	04:00 PM – 05:00 PM	15	Scope and Lifetime of Variables

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

Date	Time	No.	Topic
30.01.2023	02:00 PM – 03:00 PM	16	Module 6: Arrays and Data Structures Introduction to Arrays
	03:00 PM – 04:00 PM	17	Multi-dimensional Arrays
	04:00 PM – 05:00 PM	18	Basic Data Structures: Lists and Strings
31.01.2023	02:00 PM – 03:00 PM	19	Module 7: Error Handling and Debugging Common Programming Errors and Exceptions
	03:00 PM – 04:00 PM	20	Techniques for Debugging Code
	04:00 PM – 05:00 PM	21	Using Debugging Tools
01.02.2023	02:00 PM – 03:00 PM	22	Module 8: Basic Algorithms and Problem Solving Introduction to Algorithms
	03:00 PM – 04:00 PM	23	Basic Sorting and Searching Techniques
	04:00 PM – 05:00 PM	24	Developing and Implementing Simple Algorithms
02.02.2023	02:00 PM – 03:00 PM	25	Module 9: Project Work and Application Applying Concepts to a Small Project
	03:00 PM – 04:00 PM	26	Integrating Different Programming Constructs
	04:00 PM – 05:00 PM	27	Presenting and Discussing Solutions
03.02.2023	02:00 PM – 03:00 PM	28	Module 10: Review and Future Directions Review of Key Concepts
	03:00 PM – 04:00 PM	29	Introduction to Advanced Topics Resources for Further Learning
	04:00 PM – 05:00 PM	30	Final Exam

HOD
Dept. of Computer Applications
Aurora's P.G College, Uppal

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

1.2.1. Certificate/Value Added Courses

Timetables

20. Certificate Program on Google Cloud

AURORA'S PG COLLEGE (MCA)
Peerzadiguda, Uppal, Hyderabad-500092

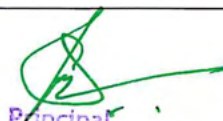## *Certificate Program on Google Cloud*
Organized by Department of Computer Applications
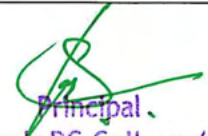
Duration: 01.02.2023 to 10.02.2023

Time Table

Day	Time	Session	Topic
01.02.2023	02:00 PM – 03:00 PM	1	Module 1: Introduction to Google Cloud Platform Overview of Google Cloud
	03:00 PM – 04:00 PM	2	Core components and architecture
	04:00 PM – 05:00 PM	3	Navigating Google Cloud Console and CLI
02.02.2023	02:00 PM – 03:00 PM	4	Module 2: Compute Services Google Compute Engine: Virtual machines and instances
	03:00 PM – 04:00 PM	5	Google Kubernetes Engine: Managing containerized applications
	04:00 PM – 05:00 PM	6	Google App Engine: Platform-as-a-Service (PaaS) for application deployment
03.02.2023	02:00 PM – 03:00 PM	7	Module 3: Storage Solutions Google Cloud Storage: Object storage options
	03:00 PM – 04:00 PM	8	Cloud SQL and Cloud Spanner: Relational databases
	04:00 PM – 05:00 PM	9	Bigtable and Datastore: NoSQL databases
04.02.2023	02:00 PM – 03:00 PM	10	Module 4: Networking and Security Virtual Private Cloud (VPC) and networking fundamentals
	03:00 PM – 04:00 PM	11	Identity and Access Management (IAM)
	04:00 PM – 05:00 PM	12	Security best practices and compliance
06.02.2023	02:00 PM – 03:00 PM	13	Module 5: Data Analytics and Big Data Introduction to BigQuery: Data warehousing and analysis
	03:00 PM – 04:00 PM	14	Dataflow: Stream and batch processing
	04:00 PM – 05:00 PM	15	Pub/Sub: Event-driven architecture

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

07.02.2023	02:00 PM – 03:00 PM	16	Module 6: Machine Learning and AI Google AI and TensorFlow integration
	03:00 PM – 04:00 PM	17	AutoML and pre-trained models
	04:00 PM – 05:00 PM	18	AI Platform: Training and deployment
08.02.2023	02:00 PM – 03:00 PM	19	Module 7: Serverless Computing Google Cloud Functions: Event-driven serverless functions
	03:00 PM – 04:00 PM	20	Cloud Run: Running containers in a serverless environment App Engine: Deploying and scaling applications
	04:00 PM – 05:00 PM	21	Module 8: Monitoring and Management Cloud Monitoring and Logging
09.02.2023	02:00 PM – 03:00 PM	22	Resource management and optimization Alerting and incident management
	03:00 PM – 04:00 PM	23	Module 9: Cost Management and Optimization Budgeting and billing
	04:00 PM – 05:00 PM	24	Cost management tools and practices Optimizing resource usage and cost-saving strategies
10.02.2023	02:00 PM – 03:00 PM	25	Module 10: Preparation for Google Cloud Certification Review of key concepts and services
	03:00 PM – 04:00 PM	26	Practice exams and study resources Exam-taking strategies and tips
	04:00 PM – 05:00 PM	27	Final Exam

HOD
Dept. of Computer Applications
Aurora's P.G College, Uppal

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

1.2.1. Certificate/Value Added Courses

Timetables

21. Training Program on Data Analytics

Training Program on Data Analytics
Organized by Department of Business Administration in association with NRich
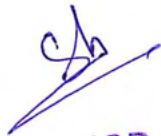
Duration: 01.02.2023 to 10.02.2023
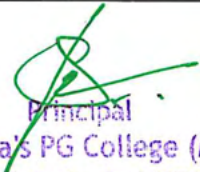
Time Table

Day	Time	Session	Topic
01.02.2023	02:00 PM – 03:00 PM	1	Module 1: Introduction to Data Analytics Overview of data analytics and its importance
	03:00 PM – 04:00 PM	2	Key concepts: Data types, data sources, and data life cycle
	04:00 PM – 05:00 PM	3	Introduction to data analytics tools and software
02.02.2023	02:00 PM – 03:00 PM	4	Module 2: Data Collection and Preparation Techniques for data collection and data sources
	03:00 PM – 04:00 PM	5	Data cleaning: Handling missing values, outliers, and inconsistencies
	04:00 PM – 05:00 PM	6	Data transformation: Normalization, aggregation, and feature engineering
03.02.2023	02:00 PM – 03:00 PM	7	Module 3: Descriptive Statistics and Exploratory Data Analysis (EDA) Measures of central tendency and dispersion
	03:00 PM – 04:00 PM	8	Visualizing data distributions: Histograms, box plots, and scatter plots
	04:00 PM – 05:00 PM	9	Identifying patterns and trends through EDA
04.02.2023	02:00 PM – 03:00 PM	10	Module 4: Introduction to Data Visualization Principles of effective data visualization
	03:00 PM – 04:00 PM	11	Tools and techniques for creating visualizations (e.g., Excel, Tableau)
	04:00 PM – 05:00 PM	12	Designing interactive dashboards and reports
06.02.2023	02:00 PM – 03:00 PM	13	Module 5: Statistical Inference and Hypothesis Testing Concepts of statistical inference and hypothesis testing
	03:00 PM – 04:00 PM	14	Common tests: t-tests, chi-square tests, ANOVA
	04:00 PM – 05:00 PM	15	Interpreting test results and drawing conclusions
07.02.2023	02:00 PM – 03:00 PM	16	Module 6: Regression Analysis Introduction to linear regression and its applications
	03:00 PM – 04:00 PM	17	Building and evaluating regression models
	04:00 PM – 05:00 PM	18	Understanding assumptions and diagnosing model issues

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

08.02.2023	02:00 PM – 03:00 PM	19	Module 7: Predictive Analytics and Machine Learning Basics Overview of predictive analytics and machine learning
	03:00 PM – 04:00 PM	20	Supervised learning techniques: Classification and regression Introduction to algorithms: Decision trees, k-nearest neighbors, and support vector machines
	04:00 PM – 05:00 PM	21	Module 8: Clustering and Unsupervised Learning Concepts of clustering and unsupervised learning
09.02.2023	02:00 PM – 03:00 PM	22	Common algorithms: k-means, hierarchical clustering, and PCA Applications and evaluation of clustering results
	03:00 PM – 04:00 PM	23	Module 9: Advanced Data Analytics Techniques Time series analysis and forecasting
	04:00 PM – 05:00 PM	24	Text analytics and natural language processing (NLP) Introduction to big data and distributed computing
10.02.2023	02:00 PM – 03:00 PM	25	Module 10: Case Studies and Practical Applications Analyzing real-world case studies and industry applications
	03:00 PM – 04:00 PM	26	Group projects involving data analytics solutions for business problems Presenting findings and recommendations to stakeholders
	04:00 PM – 05:00 PM	27	Final Exam

HOD
Dept. of Business Management
Aurora's P.G College, Uppal

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

1.2.1. Certificate/Value Added Courses

Timetables

22. Certificate Program on Business Analytics and DataScience

Certificate Program on Business Analytics and DataScience
Organized by Department of Business Administration
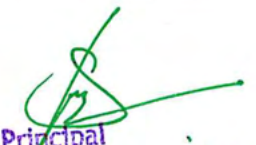
Duration: 01.03.2023 to 10.03.2023

Time Table

Day	Time	Session	Topic
01.03.2023	02:00 PM – 03:00 PM	1	Module 1: Introduction to Business Analytics and Data Science Understand the scope and importance of business analytics and data science.
	03:00 PM – 04:00 PM	2	Explore the key concepts, processes, and roles in the field. Review the tools and technologies used in business analytics and data science.
	04:00 PM – 05:00 PM	3	Module 2: Data Collection and Management Learn methods for data collection and data management practices.
02.03.2023	02:00 PM – 03:00 PM	4	Understand data sources, data quality, and data cleaning techniques
	03:00 PM – 04:00 PM	5	Explore data storage solutions and data integration methods.
	04:00 PM – 05:00 PM	6	Module 3: Statistical Analysis and Descriptive Statistics Apply descriptive statistical methods to summarize and describe data.
03.03.2023	02:00 PM – 03:00 PM	7	Use inferential statistics to make data-driven inferences and predictions.
	03:00 PM – 04:00 PM	8	Interpret statistical results to derive meaningful insights.
	04:00 PM – 05:00 PM	9	Module 4: Exploratory Data Analysis (EDA) Conduct exploratory data analysis to uncover patterns and relationships in data.
04.03.2023	02:00 PM – 03:00 PM	10	Use data visualization techniques (e.g., histograms, scatter plots) to understand data distributions. Identify and address data anomalies and outliers.
	03:00 PM – 04:00 PM	11	Module 5: Predictive Modeling and Machine Learning Develop predictive models using machine learning algorithms
	04:00 PM – 05:00 PM	12	Validate and evaluate model performance using appropriate metrics. Apply machine learning techniques to solve business problems and make predictions.
06.03.2023	02:00 PM – 03:00 PM	13	Module 6: Data Visualization Techniques Create effective data visualizations using tools (e.g., Tableau, Power BI, matplotlib).
	03:00 PM – 04:00 PM	14	Design visualizations that clearly communicate data insights and support decision-making. Explore advanced visualization techniques and interactive dashboards.
	04:00 PM – 05:00 PM	15	Module 7: Advanced Analytics and Big Data Understand the concept of big data and its impact on business analytics.
08.03.2023	02:00 PM – 03:00 PM	16	Explore advanced analytics techniques Use big data tools and frameworks to handle and analyze large datasets.
	03:00 PM – 04:00 PM	17	Module 8: Data-Driven Decision Making Develop strategies to leverage data insights for business decision-making.
	04:00 PM – 05:00 PM	18	Implement data-driven solutions to optimize business processes and outcomes. Evaluate the effectiveness of data-driven strategies and make necessary adjustments.

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

09.03.2023	02:00 PM – 03:00 PM	19	Module 9: Ethics and Privacy in Data Analytics Understand ethical considerations and privacy concerns in data analytics.
	03:00 PM – 04:00 PM	20	Learn about data protection regulations (e.g., GDPR, CCPA) and best practices.
	04:00 PM – 05:00 PM	21	Apply ethical practices in data handling, analysis, and reporting.
10.03.2023	02:00 PM – 03:00 PM	22	Module 10: Capstone Project and Case Studies Work on a capstone project to apply learned concepts to a real-world business problem.
	03:00 PM – 04:00 PM	23	Analyze case studies to understand practical applications of business analytics and data science. Present findings and recommendations based on project analysis and case study insights
	04:00 PM – 05:00 PM	24	Final Exam

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

HOD
Dept. of Business Management
Aurora's P.G College, Uppal

1.2.1. Certificate/Value Added Courses

Timetables

23. Training Program on Generative AI

AURORA'S PG COLLEGE (MCA)
Peerzadiguda, Uppal, Hyderabad-500092

Training Program on Generative AI
Organized by Department of Computer Applications in association with KapilGuru

Duration: 01.03.2023 to 10.03.2023

Time Table

Day	Time	Session	Topic
01.03.2023	02:00 PM – 03:00 PM	1	Module 1: Introduction to Generative AI Overview of generative AI and its applications
	03:00 PM – 04:00 PM	2	Historical development and key milestones Introduction to relevant technologies and tools
	04:00 PM – 05:00 PM	3	Module 2: Fundamentals of Deep Learning Overview of deep learning concepts and architectures
02.03.2023	02:00 PM – 03:00 PM	4	Introduction to neural networks, backpropagation, and optimization
	03:00 PM – 04:00 PM	5	Key frameworks and libraries (e.g., TensorFlow, PyTorch)
	04:00 PM – 05:00 PM	6	Module 3: Generative Adversarial Networks (GANs) Introduction to GANs: Architecture and components
03.03.2023	02:00 PM – 03:00 PM	7	Training GANs and common challenges Variants of GANs: DCGAN, StyleGAN, CycleGAN
	03:00 PM – 04:00 PM	8	Module 4: Transformer Models and Attention Mechanisms Overview of Transformer architecture and attention mechanisms
	04:00 PM – 05:00 PM	9	Implementation of Transformer models (e.g., GPT, BERT)
04.03.2023	02:00 PM – 03:00 PM	10	Applications of Transformers in text generation and other domains
	03:00 PM – 04:00 PM	11	Module 5: Data Preparation and Augmentation Techniques for preparing data for generative models
	04:00 PM – 05:00 PM	12	Data augmentation methods and their impact on model performance Handling data imbalance and quality issues
06.03.2023	02:00 PM – 03:00 PM	13	Module 6: Evaluating Generative Models Metrics and methods for assessing model performance (e.g., Inception Score, FID)
	03:00 PM – 04:00 PM	14	Techniques for qualitative and quantitative evaluation Strategies for improving model results
	04:00 PM – 05:00 PM	15	Module 7: Ethical and Societal Implications Ethical considerations in generative AI (e.g., deepfakes, misinformation)
08.03.2023	02:00 PM – 03:00 PM	16	Privacy concerns and data security Responsible use and regulation of generative AI technologies
	03:00 PM – 04:00 PM	17	Module 8: Real-World Applications and Case Studies Examining real-world use cases and applications of generative AI
	04:00 PM – 05:00 PM	18	Case studies of successful and problematic implementations Group projects on deploying generative AI solutions

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

09.03.2023	02:00 PM – 03:00 PM	19	Module 9: Future Trends and Advanced Topics Emerging trends in generative AI research and applications
	03:00 PM – 04:00 PM	20	Advanced topics: Self-supervised learning, few-shot learning
	04:00 PM – 05:00 PM	21	Preparing for future developments and innovations in generative AI
10.03.2023	02:00 PM – 03:00 PM	22	Module 10: Real-World Applications and Case Studies
	03:00 PM – 04:00 PM	23	Case studies of generative AI in industry (e.g., entertainment, healthcare) Group projects on developing and presenting generative AI solutions
	04:00 PM – 05:00 PM	24	Final Exam

HOD
Dept. of Computer Applications
Aurora's P.G College, Uppal

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

1.2.1. Certificate/Value Added Courses

Timetables

24. Certificate Program on Agile Project Management

Certificate Program on Agile Project Management

Organized by Department of Computer Applications

Duration: 15.11.2021 to 27.11.2021

Time Table

Day	Time	Session	Topic
15.11.2021	02:00 PM – 03:00 PM	1	Module 1: Introduction to Agile Project Management Overview of Agile Methodologies
	03:00 PM – 04:00 PM	2	The Agile Manifesto and Principles
	04:00 PM – 05:00 PM	3	Comparing Agile with Traditional Project Management
16.11.2021	02:00 PM – 03:00 PM	4	Module 2: Agile Frameworks and Methodologies Introduction to Scrum: Roles, Artifacts, and Ceremonies
	03:00 PM – 04:00 PM	5	Overview of Kanban: Principles and Practices
	04:00 PM – 05:00 PM	6	Exploring Lean and Extreme Programming (XP)
17.11.2021	02:00 PM – 03:00 PM	7	Module 3: Agile Project Lifecycle Agile Project Phases: Concept, Inception, Iteration, Release
	03:00 PM – 04:00 PM	8	Iterative Development and Incremental Delivery
	04:00 PM – 05:00 PM	9	Planning and Estimation Techniques
18.11.2021	02:00 PM – 03:00 PM	10	Module 4: Scrum Framework Scrum Roles: Product Owner, Scrum Master, Development Team
	03:00 PM – 04:00 PM	11	Scrum Artifacts: Product Backlog, Sprint Backlog, Increment
	04:00 PM – 05:00 PM	12	Scrum Ceremonies: Sprint Planning, Daily Stand-up, Sprint Review, Sprint Retrospective
20.11.2021	02:00 PM – 03:00 PM	13	Module 5: Kanban and Continuous Flow Kanban Principles and Practices
	03:00 PM – 04:00 PM	14	Setting Up and Managing a Kanban Board
	04:00 PM – 05:00 PM	15	Measuring Flow and Cycle Time

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

1.2.1. Certificate/Value Added Courses

Timetables

25. Bridge Course on Fundamentals of Statistics

Bridge Course on Fundamentals of Statistics
Organized by Department of Business Management

Duration: 15.11.2021 to 27.11.2021

Time Table

Day	Time	Session	Topic
15.11.2021	02:00 PM – 03:00 PM	1	Module 1: Introduction to Statistics Definition and Scope of Statistics
	03:00 PM – 04:00 PM	2	Types of Data: Qualitative vs. Quantitative
	04:00 PM – 05:00 PM	3	Levels of Measurement: Nominal, Ordinal, Interval, Ratio
16.11.2021	02:00 PM – 03:00 PM	4	Module 2: Descriptive Statistics Measures of Central Tendency: Mean, Median, Mode
	03:00 PM – 04:00 PM	5	Measures of Dispersion: Range, Variance, Standard Deviation
	04:00 PM – 05:00 PM	6	Data Visualization: Histograms, Bar Charts, Box Plots
17.11.2021	02:00 PM – 03:00 PM	7	Module 3: Probability Basics Fundamental Concepts: Experiment, Sample Space, Events
	03:00 PM – 04:00 PM	8	Probability Rules: Addition and Multiplication Rules
	04:00 PM – 05:00 PM	9	Conditional Probability and Independence
18.11.2021	02:00 PM – 03:00 PM	10	Module 4: Probability Distributions Discrete Distributions: Binomial Distribution
	03:00 PM – 04:00 PM	11	Continuous Distributions: Normal Distribution
	04:00 PM – 05:00 PM	12	Properties and Applications of Distributions
20.11.2021	02:00 PM – 03:00 PM	13	Module 5: Sampling and Sampling Distributions Types of Sampling Methods: Random, Stratified, Cluster
	03:00 PM – 04:00 PM	14	Sampling Distribution of the Sample Mean
	04:00 PM – 05:00 PM	15	Central Limit Theorem

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

22.11.2021	02:00 PM – 03:00 PM	16	Module 6: Inferential Statistics Hypothesis Testing: Null and Alternative Hypotheses
	03:00 PM – 04:00 PM	17	Type I and Type II Errors
	04:00 PM – 05:00 PM	18	Common Tests: t-Test, Chi-Square Test, ANOVA
23.11.2021	02:00 PM – 03:00 PM	19	Module 7: Correlation and Regression Understanding Correlation: Pearson's r
	03:00 PM – 04:00 PM	20	Simple Linear Regression: Model Fitting and Interpretation
	04:00 PM – 05:00 PM	21	Multiple Regression Analysis
24.11.2021	02:00 PM – 03:00 PM	22	Module 8: Using Statistical Software Introduction to Statistical Software (e.g., R, SPSS, Excel)
	03:00 PM – 04:00 PM	23	Data Import and Cleaning
	04:00 PM – 05:00 PM	24	Conducting Basic Statistical Analysis and Creating Visualizations
25.11.2021	02:00 PM – 03:00 PM	25	Module 9: Practical Applications and Case Studies Real-World Data Analysis Examples
	03:00 PM – 04:00 PM	26	Case Studies and Application of Statistical Methods
	04:00 PM – 05:00 PM	27	Interpretation of Results and Report Writing
26.11.2021	02:00 PM – 03:00 PM	28	Module 10: Review and Future Directions
	03:00 PM – 04:00 PM	29	Recap of Key Concepts
	04:00 PM – 05:00 PM	30	Introduction to Advanced Topics in Statistics
27.11.2021	03:00 PM – 04:00 PM	31	Final Exam

HOD
Dept. of Business Management
Aurora's P.G College, Uppal

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

1.2.1. Certificate/Value Added Courses

Timetables

26. Certificate Program on HR Analytics

AURORA'S PG COLLEGE (MCA)
Peerzadiguda, Uppal, Hyderabad-500092

Certificate Program on HR Analytics
Organized by Department of Business Administration

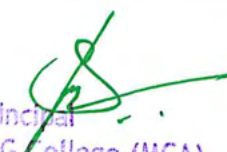**Duration: 13.12.2021 to 24.12.2021**

Time Table

Day	Time	Session	Topic
13.12.2021	02:00 PM – 03:00 PM	1	Module 1: Introduction to HR Analytics Overview of HR Analytics
	03:00 PM – 04:00 PM	2	The Role and Importance of Data in HR
	04:00 PM – 05:00 PM	3	Key Concepts and Terminologies
14.12.2021	02:00 PM – 03:00 PM	4	Module 2: Data Collection and Management Sources of HR Data (Employee Records, Surveys, Performance Data)
	03:00 PM – 04:00 PM	5	Data Collection Methods and Tools
	04:00 PM – 05:00 PM	6	Data Quality, Privacy, and Security
15.12.2021	02:00 PM – 03:00 PM	7	Module 3: Descriptive Analytics in HR Techniques for Descriptive Analysis (Mean, Median, Mode, Standard Deviation)
	03:00 PM – 04:00 PM	8	Visualizing HR Data (Charts, Graphs, Dashboards) Patterns
	04:00 PM – 05:00 PM	9	Identifying and Interpreting Basic Trends and
16.12.2021	02:00 PM – 03:00 PM	10	Module 4: Predictive Analytics in HR Introduction to Predictive Analytics
	03:00 PM – 04:00 PM	11	Techniques for Predicting HR Outcomes (Regression Analysis, Forecasting)
	04:00 PM – 05:00 PM	12	Applying Predictive Models to Recruitment, Performance, and Retention
17.12.2021	02:00 PM – 03:00 PM	13	Module 5: Advanced Analytics Techniques Machine Learning and AI in HR Analytics
	03:00 PM – 04:00 PM	14	Clustering and Segmentation Techniques
	04:00 PM – 05:00 PM	15	Text Analytics and Sentiment Analysis

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

Date	Time	No.	Topic
18.12.2021	02:00 PM – 03:00 PM	16	Module 6: Recruitment Analytics Analyzing Recruitment Data and Metrics
	03:00 PM – 04:00 PM	17	Measuring Recruitment Effectiveness (Time-to-Fill, Cost-per-Hire
	04:00 PM – 05:00 PM	18	Using Analytics to Improve Recruitment Strategies
20.12.2021	02:00 PM – 03:00 PM	19	Module 7: Performance Management Analytics Analyzing Employee Performance Data
	03:00 PM – 04:00 PM	20	Identifying Performance Trends and Insights
	04:00 PM – 05:00 PM	21	Using Analytics to Enhance Performance Management Processes
21.12.2021	02:00 PM – 03:00 PM	22	Module 8: Employee Engagement and Retention Analytics Measuring Employee Engagement and Satisfaction
	03:00 PM – 04:00 PM	23	Analyzing Turnover and Retention Data
	04:00 PM – 05:00 PM	24	Developing Strategies to Improve Employee Retention
22.12.2021	02:00 PM – 03:00 PM	25	Module 9: Workforce Planning and Analytics Forecasting Workforce Needs and Skill Gaps
	03:00 PM – 04:00 PM	26	Analyzing Workforce Trends and Utilization
	04:00 PM – 05:00 PM	27	Developing Data-Driven Workforce Planning Strategies
23.12.2021	02:00 PM – 03:00 PM	28	Module 10: Communicating HR Analytics Insights
	03:00 PM – 04:00 PM	29	Creating Effective Reports and Dashboards
	04:00 PM – 05:00 PM	30	Presenting Data-Driven Insights to Stakeholders Using Data to Drive HR Decision-Making and Strategy
24.12.2021	03:00 PM – 04:00 PM	31	Final Exam

HOD
Dept. of Business Management
Aurora's P.G College, Uppal

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

1.2.1. Certificate/Value Added Courses

Timetables
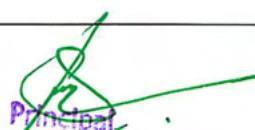
27. Bridge Course on Fundamentals of Programming

Bridge course on Fundamentals of Programming
Organized by Department of Computer Applications

Duration: 13.12.2021 to 24.12.2021

Time Table

Day	Time	Session	Topic
13.12.2021	02:00 PM – 03:00 PM	1	Module 1: Introduction to Programming Overview of Programming Languages
	03:00 PM – 04:00 PM	2	Introduction to Basic Syntax and Structure
	04:00 PM – 05:00 PM	3	Setting Up the Programming Environment
14.12.2021	02:00 PM – 03:00 PM	4	Module 2: Variables and Data Types Understanding Variables and Constants
	03:00 PM – 04:00 PM	5	Primitive Data Types: Integers, Floats, Characters, and Booleans
	04:00 PM – 05:00 PM	6	Type Conversion and Type Casting
15.12.2021	02:00 PM – 03:00 PM	7	Module 3: Operators and Expressions Arithmetic Operators
	03:00 PM – 04:00 PM	8	Relational and Logical Operators
	04:00 PM – 05:00 PM	9	Expression Evaluation and Precedence
16.12.2021	02:00 PM – 03:00 PM	10	Module 4: Control Structures Conditional Statements
	03:00 PM – 04:00 PM	11	Looping Constructs
	04:00 PM – 05:00 PM	12	Nested Loops and Conditional Statements
17.12.2021	02:00 PM – 03:00 PM	13	Module 5: Functions and Modular Programming Defining and Calling Functions
	03:00 PM – 04:00 PM	14	Function Parameters and Return Values
	04:00 PM – 05:00 PM	15	Scope and Lifetime of Variables

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

Date	Time	No.	Topic
18.12.2021	02:00 PM – 03:00 PM	16	Module 6: Arrays and Data Structures Introduction to Arrays
	03:00 PM – 04:00 PM	17	Multi-dimensional Arrays
	04:00 PM – 05:00 PM	18	Basic Data Structures: Lists and Strings
20.12.2021	02:00 PM – 03:00 PM	19	Module 7: Error Handling and Debugging Common Programming Errors and Exceptions
	03:00 PM – 04:00 PM	20	Techniques for Debugging Code
	04:00 PM – 05:00 PM	21	Using Debugging Tools
21.12.2021	02:00 PM – 03:00 PM	22	Module 8: Basic Algorithms and Problem Solving Introduction to Algorithms
	03:00 PM – 04:00 PM	23	Basic Sorting and Searching Techniques
	04:00 PM – 05:00 PM	24	Developing and Implementing Simple Algorithms
22.12.2021	02:00 PM – 03:00 PM	25	Module 9: Project Work and Application Applying Concepts to a Small Project
	03:00 PM – 04:00 PM	26	Integrating Different Programming Constructs
	04:00 PM – 05:00 PM	27	Presenting and Discussing Solutions
23.12.2021	02:00 PM – 03:00 PM	28	Module 10: Review and Future Directions Review of Key Concepts
	03:00 PM – 04:00 PM	29	Introduction to Advanced Topics
	04:00 PM – 05:00 PM	30	Resources for Further Learning
24.12.2021	03:00 PM – 04:00 PM	31	Final Exam

HOD
Dept. of Computer Applications
Aurora's P.G College, Uppal

Principal
Aurora's P G College (MCA)
Uppal, Hyderabad-500092

1.2.1. Certificate/Value Added Courses

Timetables

28. Certificate Program on Cloud Computing and Virtualization

Certificate Program on Cloud Computing and Virtualization

Organized by Department of Computer Applications

Duration: 20.01.2022 to 31.01.2022

Time Table

Day	Time	Session	Topic
20.01.2022	02:00 PM – 03:00 PM	1	Module 1: Introduction to Cloud Computing Overview of Cloud Computing
	03:00 PM – 04:00 PM	2	Cloud Service Models
	04:00 PM – 05:00 PM	3	Cloud Deployment Models (Public, Private, Hybrid)
21.01.2022	02:00 PM – 03:00 PM	4	Module 2: Cloud Computing Architectures and Technologies Cloud Computing Architecture and Components
	03:00 PM – 04:00 PM	5	Key Technologies in Cloud Computing (Virtualization, Containers, Microservices)
	04:00 PM – 05:00 PM	6	Cloud Providers and Platforms (AWS, Azure, Google Cloud)
22.01.2022	02:00 PM – 03:00 PM	7	Module 3: Introduction to Virtualization Fundamentals of Virtualization
	03:00 PM – 04:00 PM	8	Hypervisors and Virtual Machines
	04:00 PM – 05:00 PM	9	Types of Virtualization (Hardware, OS, Application)
24.01.2022	02:00 PM – 03:00 PM	10	Module 4: Virtualization Technologies and Tools Virtualization Platforms (VMware, Hyper-V, KVM)
	03:00 PM – 04:00 PM	11	Containerization Technologies (Docker, Kubernetes)
	04:00 PM – 05:00 PM	12	Managing Virtual Machines and Containers
25.01.2022	02:00 PM – 03:00 PM	13	Module 5: Cloud Resource Deployment and Management Deploying Cloud Resources (Compute, Storage, Networking)
	03:00 PM – 04:00 PM	14	Managing and Scaling Cloud Services
	04:00 PM – 05:00 PM	15	Monitoring and Optimizing Cloud Resources

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

Date	Time	No.	Topic
27.01.2022	02:00 PM – 03:00 PM	16	Module 6: Cloud Security and Compliance Security Considerations in Cloud Computing
	03:00 PM – 04:00 PM	17	Compliance and Regulatory Requirements
	04:00 PM – 05:00 PM	18	Best Practices for Securing Cloud Environments
28.01.2022	02:00 PM – 03:00 PM	19	Module 7: Implementing Virtualization Solutions Setting Up and Configuring Hypervisors
	03:00 PM – 04:00 PM	20	Creating and Managing Virtual Machines
	04:00 PM – 05:00 PM	21	Advanced Virtualization Techniques and Use Cases
29.01.2022	02:00 PM – 03:00 PM	22	Module 8: Cloud Migration and Integration Strategies for Cloud Migration
	03:00 PM – 04:00 PM	23	Tools and Techniques for Migrating Applications and Data
	04:00 PM – 05:00 PM	24	Integrating Cloud Services with On-Premises Systems
30.01.2022	02:00 PM – 03:00 PM	25	Module 9: Cost Management and Optimization in Cloud Computing Understanding Cloud Cost Models and Pricing
	03:00 PM – 04:00 PM	26	Tools and Techniques for Cost Management
	04:00 PM – 05:00 PM	27	Optimizing Cloud Usage for Cost Efficiency
31.01.2022	02:00 PM – 03:00 PM	28	Module 10: Capstone Project and Case Studies Practical Application of Cloud and Virtualization Concepts Group Projects: Designing and Implementing Cloud and Virtualization Solutions
	03:00 PM – 04:00 PM	29	Case Studies of Successful Cloud and Virtualization Implementations
	04:00 PM – 05:00 PM	30	Final Exam

HOD
Dept. of Computer Applications
Aurora's P.G College, Uppal

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

1.2.1. Certificate/Value Added Courses

Timetables

29. Certificate Program on Corporate Governance

AURORA'S PG COLLEGE (MCA)
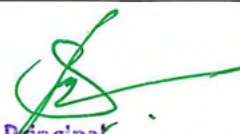### Peerzadiguda, Uppal, Hyderabad-500092

Certificate Program on Corporate Governance
Organized by Department of Business Management

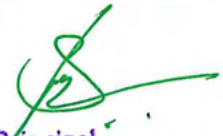**Duration: 14.02.2022 to 25.02.2022**

Time Table

Day	Time	Session	Topic
14.02.2022	02:00 PM – 03:00 PM	1	Module 1: Introduction to Corporate Governance Definition and importance of corporate governance
	03:00 PM – 04:00 PM	2	Historical evolution and key governance frameworks
	04:00 PM – 05:00 PM	3	Roles and responsibilities of governance bodies (board of directors, executive anagement)
15.02.2022	02:00 PM – 03:00 PM	4	Module 2: Governance Structures and Mechanisms Board structures and committees (audit, compensation, nomination)
	03:00 PM – 04:00 PM	5	Governance models (Anglo-American, Continental European, Asian)
	04:00 PM – 05:00 PM	6	Shareholder rights and stakeholder interests
16.02.2022	02:00 PM – 03:00 PM	7	Module 3: Corporate Ethics and Codes of Conduct Defining corporate ethics and ethical behavior
	03:00 PM – 04:00 PM	8	Development and implementation of codes of conduct
	04:00 PM – 05:00 PM	9	Role of ethics officers and compliance programs
17.02.2022	02:00 PM – 03:00 PM	10	Module 4: Regulatory Frameworks and Compliance Key regulations and standards (SOX, Dodd-Frank, GDPR)
	03:00 PM – 04:00 PM	11	Compliance and reporting requirements
	04:00 PM – 05:00 PM	12	Role of regulatory agencies and their impact on corporate governance
18.02.2022	02:00 PM – 03:00 PM	13	Module 5: Risk Management and Internal Controls Risk management frameworks and strategies
	03:00 PM – 04:00 PM	14	Internal control systems and their effectiveness
	04:00 PM – 05:00 PM	15	Monitoring and auditing practices

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

Date	Time	No.	Topic
19.02.2022	02:00 PM – 03:00 PM	16	Module 6: Ethical Decision-Making and Dilemmas Ethical decision-making models and frameworks
	03:00 PM – 04:00 PM	17	Common ethical dilemmas in business
	04:00 PM – 05:00 PM	18	Strategies for resolving ethical conflicts
21.02.2022	02:00 PM – 03:00 PM	19	Module 7: Corporate Social Responsibility (CSR) Concepts and principles of CSR
	03:00 PM – 04:00 PM	20	Integrating CSR into corporate strategy
	04:00 PM – 05:00 PM	21	Measuring and reporting on CSR performance
22.02.2022	02:00 PM – 03:00 PM	22	Module 8: Leadership and Ethical Culture The role of leadership in shaping ethical culture
	03:00 PM – 04:00 PM	23	Strategies for promoting ethical behavior among employees
	04:00 PM – 05:00 PM	24	Case studies of ethical leadership and corporate culture
23.02.2022	02:00 PM – 03:00 PM	25	Module 9: Case Studies in Corporate Governance and Ethics Analysis of high-profile corporate governance failures and scandals
	03:00 PM – 04:00 PM	26	Lessons learned and best practices
	04:00 PM – 05:00 PM	27	Comparative analysis of governance and ethics in different industries
24.02.2022	02:00 PM – 03:00 PM	28	Module 10: Future Trends and Capstone Project Emerging trends in corporate governance and ethics (e.g., ESG, digital transformation)
	03:00 PM – 04:00 PM	29	Capstone project: Develop a comprehensive governance and ethics framework for a hypothetical or real organization
	04:00 PM – 05:00 PM	30	Course review and reflections on career opportunities in corporate governance and ethics
25.02.2022	03:00 PM – 04:00 PM	31	Final Exam

HOD
Dept. of Business Management
Aurora's P.G College, Uppal

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

1.2.1. Certificate/Value Added Courses

Timetables

30. Training Program on Chatbots

AURORA'S PG COLLEGE (MCA)
Peerzadiguda, Uppal, Hyderabad-500092

Training Program on Chatbots
Organized by Department of Computer Applications

Duration: 14.02.2022 to 25.02.2022

Time Table

Day	Time	Session	Topic
14.02.2022	02:00 PM – 03:00 PM	1	Module 1: Introduction to Chatbots Overview of chatbots and their applications
	03:00 PM – 04:00 PM	2	Historical development and future trends
	04:00 PM – 05:00 PM	3	Key terminology and concepts
15.02.2022	02:00 PM – 03:00 PM	4	Module 2: Fundamentals of Natural Language Processing (NLP) Basics of NLP and its role in chatbots
	03:00 PM – 04:00 PM	5	Key NLP techniques and algorithms
	04:00 PM – 05:00 PM	6	Introduction to tokenization, entity recognition, and sentiment analysis
16.02.2022	02:00 PM – 03:00 PM	7	Module 3: Conversational Design Principles Designing effective conversational interfaces
	03:00 PM – 04:00 PM	8	Creating engaging and natural dialogue flows
	04:00 PM – 05:00 PM	9	Understanding user intent and context
17.02.2022	02:00 PM – 03:00 PM	10	Module 4: Chatbot Development Frameworks
	03:00 PM – 04:00 PM	11	Overview of popular chatbot frameworks: Dialogflow, Microsoft Bot Framework, Rasa
	04:00 PM – 05:00 PM	12	Hands-on session: Building a simple chatbot with one framework
18.02.2022	02:00 PM – 03:00 PM	13	Module 5: Integrating Chatbots with Messaging Platforms Introduction to messaging platforms: Facebook Messenger, Slack, WhatsApp
	03:00 PM – 04:00 PM	14	Techniques for integrating chatbots with these platforms
	04:00 PM – 05:00 PM	15	Hands-on session: Deploying a chatbot on a messaging platform

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

19.02.2022	02:00 PM – 03:00 PM	16	Module 6: Advanced Conversational Design Designing for complex interactions and multi-turn conversations
	03:00 PM – 04:00 PM	17	Handling ambiguity and user errors
	04:00 PM – 05:00 PM	18	Personalization and contextual understanding
21.02.2022	02:00 PM – 03:00 PM	19	Module 7: Chatbot Testing and Optimization Methods for testing chatbot performance
	03:00 PM – 04:00 PM	20	Analyzing user interactions and feedback
	04:00 PM – 05:00 PM	21	Strategies for continuous improvement and optimization
22.02.2022	02:00 PM – 03:00 PM	22	Module 8: Security and Privacy in Chatbots Understanding potential security risks
	03:00 PM – 04:00 PM	23	Implementing privacy measures and data protection
	04:00 PM – 05:00 PM	24	Best practices for secure chatbot development
23.02.2022	02:00 PM – 03:00 PM	25	Module 9: Case Studies and Real-World Applications Analyzing successful chatbot implementations across different industries
	03:00 PM – 04:00 PM	26	Discussion of case studies and their impact
	04:00 PM – 05:00 PM	27	Lessons learned and best practices
24.02.2022	02:00 PM – 03:00 PM	28	Module 10: Future Trends and Emerging Technologies Exploring advancements in AI and chatbot technology
	03:00 PM – 04:00 PM	29	The role of chatbots in emerging fields like AR/VR and IoT
	04:00 PM – 05:00 PM	30	Preparing for future developments and innovations in conversational AI
25.02.2022	03:00 PM – 04:00 PM	31	Final Exam

HOD
Dept. of Computer Applications
Aurora's P.G College, Uppal

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

1.2.1. Certificate/Value Added Courses

Timetables

31. Certificate Program on Quantum Computing and Quantum Programming
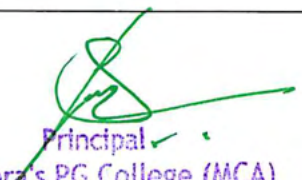
Certificate Program on Quantum Computing and Quantum Programming
Organized by Department of Computer Applications

Duration: 21.03.2022 to 31.03.2022

Time Table

Day	Time	Session	Topic
21.03.2022	02:00 PM – 03:00 PM	1	Module 1: Introduction to Quantum Computing Overview of Quantum Computing
	03:00 PM – 04:00 PM	2	Key Concepts in Quantum Mechanics
	04:00 PM – 05:00 PM	3	Quantum vs. Classical Computing
22.03.2022	02:00 PM – 03:00 PM	4	Module 2: Quantum Bits (Qubits) and Quantum Gates Understanding Qubits and Superposition
	03:00 PM – 04:00 PM	5	Quantum Entanglement and Measurement
	04:00 PM – 05:00 PM	6	Basic Quantum Gates and Operations
23.03.2022	02:00 PM – 03:00 PM	7	Module 3: Quantum Algorithms Basics Introduction to Quantum Algorithms
	03:00 PM – 04:00 PM	8	Quantum Speedup and Algorithmic Advantages
	04:00 PM – 05:00 PM	9	Overview of Key Quantum Algorithms
24.03.2022	02:00 PM – 03:00 PM	10	Module 4: Grover's Algorithm Concept and Theory Behind Grover's Algorithm
	03:00 PM – 04:00 PM	11	Implementing Grover's Algorithm
	04:00 PM – 05:00 PM	12	Applications and Performance Analysis
25.03.2022	02:00 PM – 03:00 PM	13	Module 5: Shor's Algorithm Concept and Theory Behind Shor's Algorithm
	03:00 PM – 04:00 PM	14	Implementing Shor's Algorithm
	04:00 PM – 05:00 PM	15	Applications and Performance Analysis

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

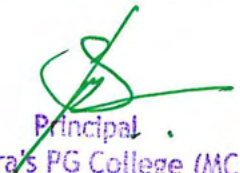| Date	Time	No.	Topic
22.11.2021	02:00 PM – 03:00 PM	16	Module 6: Agile Planning and Execution Creating and Managing Product Backlogs
	03:00 PM – 04:00 PM	17	Sprint Planning and Execution
	04:00 PM – 05:00 PM	18	Managing Agile Workflows and Tasks
23.11.2021	02:00 PM – 03:00 PM	19	Module 7: Agile Team Management Building and Leading Agile Teams
	03:00 PM – 04:00 PM	20	Facilitating Collaboration and Communication
	04:00 PM – 05:00 PM	21	Handling Conflict and Encouraging Team Dynamics
24.11.2021	02:00 PM – 03:00 PM	22	Module 8: Monitoring and Reporting in Agile Projects Tracking Progress and Performance Metrics
	03:00 PM – 04:00 PM	23	Reporting Agile Project Status
	04:00 PM – 05:00 PM	24	Using Agile Tools and Software for Project Management
25.11.2021	02:00 PM – 03:00 PM	25	Module 9: Agile Transformation and Scaling Strategies for Agile Transformation
	03:00 PM – 04:00 PM	26	Scaling Agile with Frameworks like SAFe, LeSS, and Disciplined Agile
	04:00 PM – 05:00 PM	27	Managing Multiple Agile Teams and Projects
26.11.2021	02:00 PM – 03:00 PM	28	Module 10: Capstone Project and Case Studies Application of Agile Practices in a Real-World Scenario
	03:00 PM – 04:00 PM	29	Group Projects: Planning and Managing an Agile Project
	04:00 PM – 05:00 PM	30	Analysis of Successful Agile Implementations
27.11.2021	03:00 PM – 04:00 PM	31	Final Exam

HOD
Dept. of Computer Applications
Aurora's P.G College, Uppal

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

26.03.2022	02:00 PM – 03:00 PM	16	Module 6: Quantum Programming Languages and Tools Introduction to Quantum Programming Languages (Qiskit, Q#, QuTiP)
	03:00 PM – 04:00 PM	17	Setting Up Development Environments
	04:00 PM – 05:00 PM	18	Basic Quantum Programming Constructs and Syntax
28.03.2022	02:00 PM – 03:00 PM	19	Module 7: Designing Quantum Circuits Building Quantum Circuits for Basic Algorithms
	03:00 PM – 04:00 PM	20	Simulating Quantum Circuits
	04:00 PM – 05:00 PM	21	Debugging and Optimizing Quantum Circuits
29.03.2022	02:00 PM – 03:00 PM	22	Module 8: Advanced Quantum Algorithms Quantum Fourier Transform
	03:00 PM – 04:00 PM	23	Quantum Machine Learning Algorithms
	04:00 PM – 05:00 PM	24	Quantum Error Correction
30.03.2022	02:00 PM – 03:00 PM	25	Module 9: Quantum Computing Applications Applications of Quantum Computing in Cryptography, Optimization, and Simulation
	03:00 PM – 04:00 PM	26	Case Studies of Quantum Computing Use Cases
	04:00 PM – 05:00 PM	27	Future Trends and Emerging Applications
31.03.2022	02:00 PM – 03:00 PM	28	Module 10: Challenges and Future Directions Current Challenges in Quantum Computing (Scalability, Error Rates)
	03:00 PM – 04:00 PM	29	Quantum Computing Hardware and Architectures The Future of Quantum Computing and Research Directions
	04:00 PM – 05:00 PM	30	Final Exam

HOD
Dept. of Computer Applications
Aurora's P.G College, Uppal

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

1.2.1. Certificate/Value Added Courses

Timetables

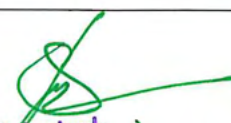## 32. Training Program on DataScience with Python

Training Program on DataScience with Python

Organized by Department of Computer Applications in association with MagicBus

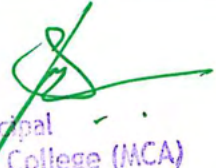**Duration: 21.03.2022 to 31.03.2022**

Time Table

Day	Time	Session	Topic
21.03.2022	02:00 PM – 03:00 PM	1	Module 1: Introduction to Python for Data Science Basics of Python programming
	03:00 PM – 04:00 PM	2	Essential libraries: NumPy, Pandas
	04:00 PM – 05:00 PM	3	Python environment setup and tools
22.03.2022	02:00 PM – 03:00 PM	4	Module 2: Data Collection and Acquisition Techniques for data gathering (APIs, web scraping)
	03:00 PM – 04:00 PM	5	Handling different data formats (CSV, JSON, Excel)
	04:00 PM – 05:00 PM	6	Introduction to data sources and data pipelines
23.03.2022	02:00 PM – 03:00 PM	7	Module 3: Data Cleaning and Preprocessing Data wrangling with Pandas
	03:00 PM – 04:00 PM	8	Handling missing values, outliers, and inconsistencies
	04:00 PM – 05:00 PM	9	Data transformation and feature engineering
24.03.2022	02:00 PM – 03:00 PM	10	Module 4: Exploratory Data Analysis (EDA) Descriptive statistics and data summary
	03:00 PM – 04:00 PM	11	Data visualization with Matplotlib and Seaborn
	04:00 PM – 05:00 PM	12	Identifying patterns, trends, and insights
25.03.2022	02:00 PM – 03:00 PM	13	Module 5: Statistical Analysis and Hypothesis Testing Probability distributions and statistical inference
	03:00 PM – 04:00 PM	14	Regression analysis (linear and logistic)
	04:00 PM – 05:00 PM	15	Hypothesis testing and interpretation

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

26.03.2022	02:00 PM – 03:00 PM	16	Module 6: Introduction to Machine Learning Overview of machine learning concepts
	03:00 PM – 04:00 PM	17	Supervised learning algorithms (classification and regression)
	04:00 PM – 05:00 PM	18	Model evaluation metrics and techniques
28.03.2022	02:00 PM – 03:00 PM	19	Module 7: Advanced Machine Learning Techniques Ensemble methods (e.g., random forests, gradient boosting)
	03:00 PM – 04:00 PM	20	Introduction to deep learning and neural networks
	04:00 PM – 05:00 PM	21	Implementing models with TensorFlow or Keras
29.03.2022	02:00 PM – 03:00 PM	22	Module 8: Big Data and Database Management SQL fundamentals and database querying
	03:00 PM – 04:00 PM	23	Working with big data tools (e.g., PySpark) Data extraction, manipulation, and integration
	04:00 PM – 05:00 PM	24	Module 9: Data Science Workflows and Automation
30.03.2022	02:00 PM – 03:00 PM	25	Automating data processing and analysis tasks Tools for workflow management (e.g., Apache Airflow)
	03:00 PM – 04:00 PM	26	Building and managing end-to-end data science workflows
	04:00 PM – 05:00 PM	27	Module 10: Ethics, Privacy, and Capstone Project Ethical considerations and data privacy issues
31.03.2022	02:00 PM – 03:00 PM	28	Best practices for responsible data use
	03:00 PM – 04:00 PM	29	Capstone project: Applying course knowledge to a real-world data problem, including project planning, execution, and presentation
	04:00 PM – 05:00 PM	30	Final Exam

HOD
Dept. of Computer Applications
Aurora's P.G College, Uppal

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

1.2.1. Certificate/Value Added Courses

Timetables

33. Certificate Program on Mobile App Development

AURORA'S PG COLLEGE (MCA)
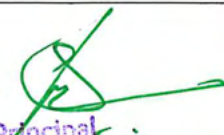## Peerzadiguda, Uppal, Hyderabad-500092

Certificate Program on Mobile App Development

Organized by Department of Computer Applications
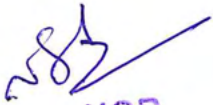
Duration: 05.10.2020 to 16.10.2020

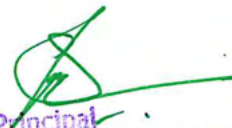## *Time Table*

Day	Time	Session	Topic
05.10.2020	02:00 PM – 03:00 PM	1	Module 1: Introduction to Mobile App Development Overview of Mobile App Development
	03:00 PM – 04:00 PM	2	iOS vs. Android Development
	04:00 PM – 05:00 PM	3	Tools and Technologies: Xcode, Android Studio
06.10.2020	02:00 PM – 03:00 PM	4	Module 2: Programming Languages and Development Environments Introduction to Swift for iOS Development
	03:00 PM – 04:00 PM	5	Introduction to Kotlin/Java for Android Development
	04:00 PM – 05:00 PM	6	Setting Up Development Environments and Tools
07.10.2020	02:00 PM – 03:00 PM	7	Module 3: Mobile App Design Principles User Interface (UI) and User Experience (UX) Design
	03:00 PM – 04:00 PM	8	Platform-Specific Design Guidelines (Material Design for Android, Human Interface Guidelines for iOS)
	04:00 PM – 05:00 PM	9	Designing Responsive and Accessible UIs
08.10.2020	02:00 PM – 03:00 PM	10	Module 4: Building iOS Applications Xcode Basics and Interface Builder
	03:00 PM – 04:00 PM	11	Creating and Managing iOS Projects
	04:00 PM – 05:00 PM	12	Implementing iOS UI Components and Controls
09.10.2020	02:00 PM – 03:00 PM	13	Module 5: Building Android Applications Android Studio Basics and Layout Editor
	03:00 PM – 04:00 PM	14	Creating and Managing Android Projects
	04:00 PM – 05:00 PM	15	Implementing Android UI Components and Controls

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

12.10.2020	02:00 PM – 03:00 PM	16	Module 6: Mobile App Navigation and Architecture Navigation Patterns and Techniques (Tab Bars, Navigation Drawers)
	03:00 PM – 04:00 PM	17	Implementing Navigation in iOS and Android
	04:00 PM – 05:00 PM	18	App Architecture Patterns (MVC, MVVM)
13.10.2020	02:00 PM – 03:00 PM	19	Module 7: Data Storage and Persistence Local Data Storage Options (Core Data for iOS, Room for Android)
	03:00 PM – 04:00 PM	20	Using SQLite and Shared Preferences
	04:00 PM – 05:00 PM	21	Handling Data Synchronization and Offline Access
14.10.2020	02:00 PM – 03:00 PM	22	Module 8: Integration with APIs and Web Services Consuming RESTful APIs and Web Services
	03:00 PM – 04:00 PM	23	Handling JSON Data and Network Requests
	04:00 PM – 05:00 PM	24	Implementing Authentication and Authorization
15.10.2020	02:00 PM – 03:00 PM	25	Module 9: Testing and Debugging Testing Strategies for Mobile Apps (Unit Testing, UI Testing)
	03:00 PM – 04:00 PM	26	Debugging Tools and Techniques
	04:00 PM – 05:00 PM	27	Performance Optimization and Profiling
16.10.2020	02:00 PM – 03:00 PM	28	Module 10: Deployment and Maintenance Preparing Apps for App Store Submission (iOS App Store, Google Play Store)
	03:00 PM – 04:00 PM	29	Managing App Updates and Versions Post-Deployment Maintenance and User Feedback
	04:00 PM – 05:00 PM	30	Final Exam

HOD
Dept. of Computer Applications
Aurora's P.G College, Uppal

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

1.2.1. Certificate/Value Added Courses

Timetables

34. Certificate Program on Cloud Computing and DevOPS

Certificate Program on Cloud Computing and DevOps

Organized by Department of Computer Applications
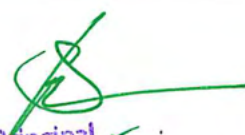
Duration: 09.11.2020 to 20.11.2020

Time Table

Day	Time	Session	Topic
09.11.2020	02:00 PM – 03:00 PM	1	Module 1: Introduction to Cloud Computing Overview of Cloud Computing
	03:00 PM – 04:00 PM	2	Cloud Service Models: IaaS, PaaS, SaaS
	04:00 PM – 05:00 PM	3	Cloud Deployment Models: Public, Private, Hybrid
10.11.2020	02:00 PM – 03:00 PM	4	Module 2: Major Cloud Providers and Their Services Introduction to AWS, Azure, Google Cloud Platform (GCP)
	03:00 PM – 04:00 PM	5	Core Services and Tools of Each Provider
	04:00 PM – 05:00 PM	6	Choosing the Right Cloud Provider for Your Needs
11.11.2020	02:00 PM – 03:00 PM	7	Module 3: Designing Cloud Architectures Cloud Architecture Best Practices
	03:00 PM – 04:00 PM	8	Designing Scalable and Resilient Systems
	04:00 PM – 05:00 PM	9	Security Considerations in Cloud Architectures
12.11.2020	02:00 PM – 03:00 PM	10	Module 4: Deploying Cloud Solutions Provisioning Cloud Resources and Services
	03:00 PM – 04:00 PM	11	Deploying Applications in the Cloud
	04:00 PM – 05:00 PM	12	Managing and Monitoring Cloud Resources
13.11.2020	02:00 PM – 03:00 PM	13	Module 5: Introduction to DevOps Understanding DevOps Principles and Culture
	03:00 PM – 04:00 PM	14	Key DevOps Practices and Tools
	04:00 PM – 05:00 PM	15	The DevOps Lifecycle: Continuous Integration, Continuous Delivery, Continuous Deployment

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

Date	Time	No.	Topic
16.11.2020	02:00 PM – 03:00 PM	16	Module 6: Automation and Configuration Management Tools for Automation: Ansible, Puppet, Chef
	03:00 PM – 04:00 PM	17	Infrastructure as Code (IaC) with Terraform
	04:00 PM – 05:00 PM	18	Configuring and Managing Cloud Resources with Automation Tools
17.11.2020	02:00 PM – 03:00 PM	19	Module 7: Continuous Integration and Continuous Delivery (CI/CD) Setting Up CI/CD Pipelines
	03:00 PM – 04:00 PM	20	Integrating Code Repositories with CI/CD Tools
	04:00 PM – 05:00 PM	21	Automating Build, Test, and Deployment Processes
18.11.2020	02:00 PM – 03:00 PM	22	Module 8: Monitoring and Logging in Cloud and DevOps Monitoring Cloud Resources and Applications
	03:00 PM – 04:00 PM	23	Implementing Logging and Alerting
	04:00 PM – 05:00 PM	24	Analyzing and Responding to Performance Metrics
19.11.2020	02:00 PM – 03:00 PM	25	Module 9: Security and Compliance in Cloud and DevOps Cloud Security Best Practices
	03:00 PM – 04:00 PM	26	Implementing Security Controls and Compliance Measures
	04:00 PM – 05:00 PM	27	Managing Identity and Access in Cloud Environments
20.11.2020	02:00 PM – 03:00 PM	28	Module 10: Case Studies and Practical Applications Analyzing Real-World Cloud Computing and DevOps Implementations
	03:00 PM – 04:00 PM	29	Group Projects: Designing and Implementing Cloud-Based Solutions with DevOps Practices Presenting and Reviewing Projects
	04:00 PM – 05:00 PM	30	Final Exam

HOD
Dept. of Computer Applications
Aurora's P.G College, Uppal

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

1.2.1. Certificate/Value Added Courses

Timetables

35. Bridge Course on Fundamentals of Statistics

Bridge Course on Fundamentals of Statistics
Organized by Department of Business Management

Duration: 09.11.2020 to 20.11.2020

Time Table

Day	Time	Session	Topic
09.11.2020	02:00 PM – 03:00 PM	1	Module 1: Introduction to Statistics Definition and Scope of Statistics
	03:00 PM – 04:00 PM	2	Types of Data: Qualitative vs. Quantitative
	04:00 PM – 05:00 PM	3	Levels of Measurement: Nominal, Ordinal, Interval, Ratio
10.11.2020	02:00 PM – 03:00 PM	4	Module 2: Descriptive Statistics Measures of Central Tendency: Mean, Median, Mode
	03:00 PM – 04:00 PM	5	Measures of Dispersion: Range, Variance, Standard Deviation
	04:00 PM – 05:00 PM	6	Data Visualization: Histograms, Bar Charts, Box Plots
11.11.2020	02:00 PM – 03:00 PM	7	Module 3: Probability Basics Fundamental Concepts: Experiment, Sample Space, Events
	03:00 PM – 04:00 PM	8	Probability Rules: Addition and Multiplication Rules
	04:00 PM – 05:00 PM	9	Conditional Probability and Independence
12.11.2020	02:00 PM – 03:00 PM	10	Module 4: Probability Distributions Discrete Distributions: Binomial Distribution
	03:00 PM – 04:00 PM	11	Continuous Distributions: Normal Distribution
	04:00 PM – 05:00 PM	12	Properties and Applications of Distributions
13.11.2020	02:00 PM – 03:00 PM	13	Module 5: Sampling and Sampling Distributions Types of Sampling Methods: Random, Stratified, Cluster
	03:00 PM – 04:00 PM	14	Sampling Distribution of the Sample Mean
	04:00 PM – 05:00 PM	15	Central Limit Theorem

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

16.11.2020	02:00 PM – 03:00 PM	16	Module 6: Inferential Statistics Hypothesis Testing: Null and Alternative Hypotheses
	03:00 PM – 04:00 PM	17	Type I and Type II Errors
	04:00 PM – 05:00 PM	18	Common Tests: t-Test, Chi-Square Test, ANOVA
17.11.2020	02:00 PM – 03:00 PM	19	Module 7: Correlation and Regression Understanding Correlation: Pearson's r
	03:00 PM – 04:00 PM	20	Simple Linear Regression: Model Fitting and Interpretation
	04:00 PM – 05:00 PM	21	Multiple Regression Analysis
18.11.2020	02:00 PM – 03:00 PM	22	Module 8: Using Statistical Software Introduction to Statistical Software (e.g., R, SPSS, Excel)
	03:00 PM – 04:00 PM	23	Data Import and Cleaning
	04:00 PM – 05:00 PM	24	Conducting Basic Statistical Analysis and Creating Visualizations
19.11.2020	02:00 PM – 03:00 PM	25	Module 9: Practical Applications and Case Studies Real-World Data Analysis Examples
	03:00 PM – 04:00 PM	26	Case Studies and Application of Statistical Methods
	04:00 PM – 05:00 PM	27	Interpretation of Results and Report Writing
20.11.2020	02:00 PM – 03:00 PM	28	Module 10: Review and Future Directions
	03:00 PM – 04:00 PM	29	Recap of Key Concepts Introduction to Advanced Topics in Statistics
	04:00 PM – 05:00 PM	30	Final Exam

HOD
Dept. of Business Management
Aurora's P.G College, Uppal

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

1.2.1. Certificate/Value Added Courses

Timetables

36. Bridge Course on Fundamentals of Programming

Bridge Course on Fundamentals of Programming
Organized by Department of Computer Applications
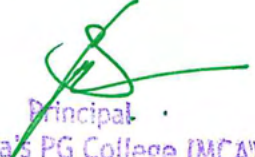
Duration: 01.12.2020 to 11.12.2020

Time Table

Day	Time	Session	Topic
01.12.2020	02:00 PM – 03:00 PM	1	Module 1: Introduction to Programming Overview of Programming Languages
	03:00 PM – 04:00 PM	2	Introduction to Basic Syntax and Structure
	04:00 PM – 05:00 PM	3	Setting Up the Programming Environment
02.12.2020	02:00 PM – 03:00 PM	4	Module 2: Variables and Data Types Understanding Variables and Constants
	03:00 PM – 04:00 PM	5	Primitive Data Types: Integers, Floats, Characters, and Booleans
	04:00 PM – 05:00 PM	6	Type Conversion and Type Casting
03.12.2020	02:00 PM – 03:00 PM	7	Module 3: Operators and Expressions Arithmetic Operators
	03:00 PM – 04:00 PM	8	Relational and Logical Operators
	04:00 PM – 05:00 PM	9	Expression Evaluation and Precedence
04.12.2020	02:00 PM – 03:00 PM	10	Module 4: Control Structures Conditional Statements
	03:00 PM – 04:00 PM	11	Looping Constructs
	04:00 PM – 05:00 PM	12	Nested Loops and Conditional Statements
05.12.2020	02:00 PM – 03:00 PM	13	Module 5: Functions and Modular Programming Defining and Calling Functions
	03:00 PM – 04:00 PM	14	Function Parameters and Return Values
	04:00 PM – 05:00 PM	15	Scope and Lifetime of Variables

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

Date	Time	No.	Topic
07.12.2020	02:00 PM – 03:00 PM	16	Module 6: Arrays and Data Structures Introduction to Arrays
	03:00 PM – 04:00 PM	17	Multi-dimensional Arrays
	04:00 PM – 05:00 PM	18	Basic Data Structures: Lists and Strings
08.12.2020	02:00 PM – 03:00 PM	19	Module 7: Error Handling and Debugging Common Programming Errors and Exceptions
	03:00 PM – 04:00 PM	20	Techniques for Debugging Code
	04:00 PM – 05:00 PM	21	Using Debugging Tools
09.12.2020	02:00 PM – 03:00 PM	22	Module 8: Basic Algorithms and Problem Solving Introduction to Algorithms
	03:00 PM – 04:00 PM	23	Basic Sorting and Searching Techniques
	04:00 PM – 05:00 PM	24	Developing and Implementing Simple Algorithms
10.12.2020	02:00 PM – 03:00 PM	25	Module 9: Project Work and Application Applying Concepts to a Small Project
	03:00 PM – 04:00 PM	26	Integrating Different Programming Constructs
	04:00 PM – 05:00 PM	27	Presenting and Discussing Solutions
11.12.2020	02:00 PM – 03:00 PM	28	Module 10: Review and Future Directions Review of Key Concepts
	03:00 PM – 04:00 PM	29	Introduction to Advanced Topics Resources for Further Learning
	04:00 PM – 05:00 PM	30	Final Exam

HOD
Dept. of Computer Applications
Aurora's P.G College, Uppal

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

1.2.1. Certificate/Value Added Courses

Timetables

37. Certificate Program on Enterprise Resource Planning

AURORA'S PG COLLEGE (MCA)
Peerzadiguda, Uppal, Hyderabad-500092

Certificate Program on Enterprise Resource Planning
Organized by Department of Business Management
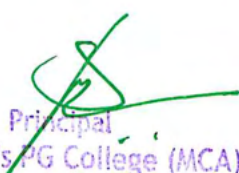
Duration: 01.12.2020 to 11.12.2020

Time Table

Day	Time	Session	Topic
01.12.2020	02:00 PM – 03:00 PM	1	Module 1: Introduction to ERP Systems
	03:00 PM – 04:00 PM	2	Overview of ERP systems and their importance
	04:00 PM – 05:00 PM	3	Key components and architecture of ERP systems
02.12.2020	02:00 PM – 03:00 PM	4	Module 2: Core ERP Modules. Detailed exploration of ERP modules: Finance, Human Resources, Supply Chain
	03:00 PM – 04:00 PM	5	Management, and Customer Relationship Management
	04:00 PM – 05:00 PM	6	Functionality and integration of each module
03.12.2020	02:00 PM – 03:00 PM	7	Module 3: ERP Implementation Planning
	03:00 PM – 04:00 PM	8	Phases of ERP implementation: Planning, Design, Configuration, and Deployment
	04:00 PM – 05:00 PM	9	Project management methodologies for ERP implementation
04.12.2020	02:00 PM – 03:00 PM	10	Module 4: System Integration and Data Management
	03:00 PM – 04:00 PM	11	Integrating ERP systems with existing IT infrastructure
	04:00 PM – 05:00 PM	12	Data migration, synchronization, and management strategies
05.12.2020	02:00 PM – 03:00 PM	13	Module 5: Evaluating ERP Vendors and Solutions
	03:00 PM – 04:00 PM	14	Criteria for selecting ERP vendors and solutions
	04:00 PM – 05:00 PM	15	Comparative analysis of leading ERP systems

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

Date	Time	No.	Topic
07.12.2020	02:00 PM – 03:00 PM	16	Module 6: Change Management in ERP Implementations
	03:00 PM – 04:00 PM	17	Strategies for managing organizational change during ERP adoption
	04:00 PM – 05:00 PM	18	Techniques for user training and support
08.12.2020	02:00 PM – 03:00 PM	19	Module 7: Customization and Configuration Best Practices
	03:00 PM – 04:00 PM	20	Customizing ERP systems to meet organizational needs
	04:00 PM – 05:00 PM	21	Best practices for system configuration and optimization
09.12.2020	02:00 PM – 03:00 PM	22	Module 8: Future Trends in ERP
	03:00 PM – 04:00 PM	23	Emerging trends in ERP technology: Cloud-based solutions, AI, and IoT
	04:00 PM – 05:00 PM	24	Impact of future technologies on ERP systems
10.12.2020	02:00 PM – 03:00 PM	25	Module 9: ERP System Performance and Evaluation
	03:00 PM – 04:00 PM	26	Methods for assessing ERP system performance
	04:00 PM – 05:00 PM	27	Key performance indicators (KPIs) and return on investment (ROI) analysis
11.12.2020	02:00 PM – 03:00 PM	28	Module 10: Capstone Project: ERP Implementation Hands-on project involving the planning and execution of an ERP system implementation
	03:00 PM – 04:00 PM	29	Presentation and evaluation of the project based on real-world scenarios
	04:00 PM – 05:00 PM	30	Final Exam

HOD
Dept. of Business Management
Aurora's P.G College, Uppal

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

1.2.1. Certificate/Value Added Courses

Timetables

38. Certificate Program on Augmented Reality and Virtual Reality

AURORA'S PG COLLEGE (MCA)
Peerzadiguda, Uppal, Hyderabad-500092

Certificate Program on Augmented Reality (AR) and Virtual Reality (VR)
Organized by Department of Computer Applications

Duration: 15.03.2021 to 27.03.2021

Time Table

Day	Time	Session	Topic
15.03.2021	02:00 PM – 03:00 PM	1	Module 1: Introduction to Augmented Reality (AR) and Virtual Reality (VR) Definitions and concepts of AR and VR
	03:00 PM – 04:00 PM	2	Historical development and technological evolution
	04:00 PM – 05:00 PM	3	Key differences and similarities between AR and VR Overview of current and potential applications
16.03.2021	02:00 PM – 03:00 PM	4	Module 2: AR and VR Hardware Essentials AR hardware: Smart glasses, smartphones, tablets
	03:00 PM – 04:00 PM	5	VR hardware: Headsets, controllers, tracking systems Understanding sensors and their roles in AR and VR
	04:00 PM – 05:00 PM	6	Comparative analysis of AR and VR hardware
17.03.2021	02:00 PM – 03:00 PM	7	Module 3: AR and VR Software and Development Platforms
	03:00 PM – 04:00 PM	8	Overview of AR and VR development platforms Introduction to development environments and tools
	04:00 PM – 05:00 PM	9	Basics of programming for AR and VR applications
18.03.2021	02:00 PM – 03:00 PM	10	Module 4: Designing for AR and VR Principles of UX/UI design for AR and VR
	03:00 PM – 04:00 PM	11	Techniques for creating immersive experiences
	04:00 PM – 05:00 PM	12	Interaction models and user interfaces specific to AR and VR Accessibility considerations in AR and VR design
19.03.2021	02:00 PM – 03:00 PM	13	Module 5: Developing Augmented Reality Applications Introduction to AR development frameworks
	03:00 PM – 04:00 PM	14	Hands-on experience with ARKit (iOS) and ARCore (Android)
	04:00 PM – 05:00 PM	15	Building and testing simple AR applications Case studies of effective AR applications

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

Date	Time	No.	Topic
20.03.2021	02:00 PM – 03:00 PM	16	Module 6: Developing Virtual Reality Applications Introduction to VR development frameworks
	03:00 PM – 04:00 PM	17	Hands-on experience with Unity and Unreal Engine for VR
	04:00 PM – 05:00 PM	18	Building and testing basic VR applications Case studies of successful VR projects
23.03.2021	02:00 PM – 03:00 PM	19	Module 7: Creating Content for AR and VR 3D modeling and animation techniques for AR and VR
	03:00 PM – 04:00 PM	20	Texturing, lighting, and rendering considerations
	04:00 PM – 05:00 PM	21	Integrating audio and spatial sound design Tools and best practices for content creation
24.03.2021	02:00 PM – 03:00 PM	22	Module 8: Industry Applications and Use Cases Examination of AR and VR applications in various industries (education, healthcare, entertainment, retail)
	03:00 PM – 04:00 PM	23	Anaysis of successful AR and VR projects
	04:00 PM – 05:00 PM	24	Trends and future directions for AR and VR applications
25.03.2021	02:00 PM – 03:00 PM	25	Module 9: Challenges and Ethical Considerations Technical challenges and solutions (e.g., latency, hardware limitations)
	03:00 PM – 04:00 PM	26	Privacy, security, and data usage issues
	04:00 PM – 05:00 PM	27	Ethical considerations and societal impact Strategies for addressing challenges and ethical dilemmas
26.03.2021	02:00 PM – 03:00 PM	28	Module 10: Future Trends and Capstone Project Emerging trends and technologies in AR and VR (e.g., mixed reality, haptics, AI integration)
	03:00 PM – 04:00 PM	29	Predictions and future directions for AR and VR
	04:00 PM – 05:00 PM	30	Capstone project: Design, develop, and present a complete AR or VR application Course review and reflections on career opportunities in AR and VR
27.03.2021	03:00 PM – 04:00 PM	31	Final Exam

HOD
Dept. of Computer Applications
Aurora's P.G College, Uppal

Principal -
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

1.2.1. Certificate/Value Added Courses

Timetables

39. Certificate Program on Leadership in the Digital Age

AURORA'S PG COLLEGE (MCA)
Peerzadiguda, Uppal, Hyderabad-500092

Certificate Program on Leadership in the Digital Age
Organized by Department of Business Administration
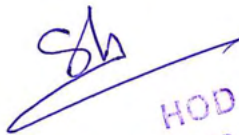
Duration: 21.10.2019 to 31.10.2019

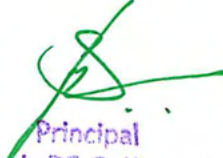## *Time Table*

Day	Time	Session	Topic
21.10.2019	02:00 PM – 03:00 PM	1	Module 1: Introduction to Digital Leadership Definition and importance of digital leadership
	03:00 PM – 04:00 PM	2	The impact of digital transformation on leadership roles
	04:00 PM – 05:00 PM	3	Key characteristics of effective digital leaders
22.10.2019	02:00 PM – 03:00 PM	4	Module 2: Understanding Digital Transformation Overview of digital transformation and its impact on organizations
	03:00 PM – 04:00 PM	5	Case studies of successful digital transformations
	04:00 PM – 05:00 PM	6	The role of technology in driving organizational change
23.10.2019	02:00 PM – 03:00 PM	7	Module 3: Developing Digital Leadership Skills Core competencies for digital leaders
	03:00 PM – 04:00 PM	8	Building a digital mindset and adaptability
	04:00 PM – 05:00 PM	9	Strategies for continuous learning and skill development
24.10.2019	02:00 PM – 03:00 PM	10	Module 4: Leveraging Digital Tools and Technologies Introduction to key digital tools and platforms (e.g., collaboration software, data analytics)
	03:00 PM – 04:00 PM	11	Integrating technology into leadership practices
	04:00 PM – 05:00 PM	12	Best practices for using digital tools to enhance productivity
25.10.2019	02:00 PM – 03:00 PM	13	Module 5: Strategic Decision-Making in a Digital World Utilizing data and analytics for informed decision-making
	03:00 PM – 04:00 PM	14	Digital strategies for competitive advantage
	04:00 PM – 05:00 PM	15	Case studies on data-driven decision-making

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

26.10.2019	02:00 PM – 03:00 PM	16	Module 6: Leading Through Change and Innovation Managing digital disruption and technological change
	03:00 PM – 04:00 PM	17	Overcoming resistance to change and building a culture of innovation
	04:00 PM – 05:00 PM	18	Strategies for fostering innovation and creativity
27.10.2019	02:00 PM – 03:00 PM	19	Module 7: Enhancing Communication and Collaboration Effective digital communication strategies
	03:00 PM – 04:00 PM	20	Tools and techniques for virtual collaboration
	04:00 PM – 05:00 PM	21	Building and leading remote and hybrid teams
28.10.2019	02:00 PM – 03:00 PM	22	Module 8: Ethical Considerations and Digital Governance Ethical issues in digital leadership (e.g., data privacy, security)
	03:00 PM – 04:00 PM	23	Developing policies for digital governance
	04:00 PM – 05:00 PM	24	Ensuring responsible use of technology and data
29.10.2019	02:00 PM – 03:00 PM	25	Module 9: Analyzing Digital Trends and Challenges Emerging trends in digital technology and their implications for leadership
	03:00 PM – 04:00 PM	26	Addressing challenges related to cybersecurity, AI, and automation
	04:00 PM – 05:00 PM	27	Preparing for the future of digital leadership
30.10.2019	02:00 PM – 03:00 PM	28	Module 10: Capstone Project and Future Directions Capstone project: Develop a digital leadership strategy for a case study or real-world scenario
	03:00 PM – 04:00 PM	29	Presentation and feedback on the capstone project
	04:00 PM – 05:00 PM	30	Reflecting on future trends and career opportunities in digital leadership
31.10.2019	03:00 PM – 04:00 PM	31	Final Exam

HOD
Dept. of Business Management
Aurora's P.G College, Uppal

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

1.2.1. Certificate/Value Added Courses

Timetables

40. Certificate Program on Natural Language Processing

Certificate Program on Natural Language Processing (NLP)

Organized by Department of Computer Applications
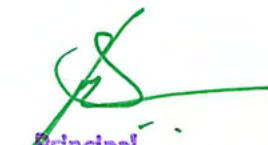
Duration: 13.11.2019 to 23.11.2019

Time Table

Day	Time	Session	Topic
13.11.2019	02:00 PM – 03:00 PM	1	Module 1: Introduction to Natural Language Processing Overview of NLP and its significance
	03:00 PM – 04:00 PM	2	Historical context and evolution of NLP
	04:00 PM – 05:00 PM	3	Key applications and use cases of NLP
14.11.2019	02:00 PM – 03:00 PM	4	Module 2: Text Processing and Representation Tokenization and text normalization
	03:00 PM – 04:00 PM	5	Text representation methods (bag-of-words, TF-IDF, word embeddings)
	04:00 PM – 05:00 PM	6	Handling and preprocessing text data
15.11.2019	02:00 PM – 03:00 PM	7	Module 3: Syntax and Parsing Introduction to syntactic analysis
	03:00 PM – 04:00 PM	8	Part-of-speech tagging
	04:00 PM – 05:00 PM	9	Parsing techniques and dependency parsing
16.11.2019	02:00 PM – 03:00 PM	10	Module 4: Semantic Analysis Understanding semantics in NLP
	03:00 PM – 04:00 PM	11	Named entity recognition (NER) Word sense disambiguation
	04:00 PM – 05:00 PM	12	Coreference resolution
18.11.2019	02:00 PM – 03:00 PM	13	Module 5: Sentiment Analysis and Text Classification Techniques for sentiment analysis
	03:00 PM – 04:00 PM	14	Building text classification models
	04:00 PM – 05:00 PM	15	Evaluation metrics for classification tasks

Principal,
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

19.11.2019	02:00 PM – 03:00 PM	16	Module 6: Machine Translation and Language Generation Overview of machine translation techniques
	03:00 PM – 04:00 PM	17	Introduction to sequence-to-sequence models
	04:00 PM – 05:00 PM	18	Language generation and text summarization
20.11.2019	02:00 PM – 03:00 PM	19	Module 7: Advanced NLP Models Introduction to deep learning in NLP
	03:00 PM – 04:00 PM	20	Working with embeddings (Word2Vec, GloVe)
	04:00 PM – 05:00 PM	21	Transformer models and attention mechanisms
21.11.2019	02:00 PM – 03:00 PM	22	Module 8: NLP Tools and Libraries Hands-on with NLTK, spaCy, and other NLP libraries
	03:00 PM – 04:00 PM	23	Using Hugging Face Transformers for state-of-the-art NLP models
	04:00 PM – 05:00 PM	24	Practical exercises and examples
22.11.2019	02:00 PM – 03:00 PM	25	Module 9: Real-World NLP Applications Applications of NLP in search engines, chatbots, and virtual assistants
	03:00 PM – 04:00 PM	26	Case studies of successful NLP implementations
	04:00 PM – 05:00 PM	27	Ethical considerations and challenges in NLP applications
23.11.2019	02:00 PM – 03:00 PM	28	Module 10: Capstone Project and Future Directions Capstone project: Develop and present an NLP solution for a real-world problem
	03:00 PM – 04:00 PM	29	Discussion on future trends and advancements in NLP Course review and reflections on career opportunities in NLP
	04:00 PM – 05:00 PM	30	Final Exam

HOD
Dept. of Computer Applications
Aurora's P.G College, Uppal

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

1.2.1. Certificate/Value Added Courses

Timetables

41. Training Program on Finance and Accounting

AURORA'S PG COLLEGE (MCA)
Peerzadiguda, Uppal, Hyderabad-500092

Training Program on Finance and Accounting
Organized by Department of Business Management

Duration: 13.11.2019 to 23.11.2019

Time Table

Day	Time	Session	Topic
13.11.2019	02:00 PM – 03:00 PM	1	Module 1: Introduction to Financial Accounting
	03:00 PM – 04:00 PM	2	Fundamentals of financial accounting
	04:00 PM – 05:00 PM	3	Key financial statements: Balance Sheet, Income Statement, and Cash Flow Statement
14.11.2019	02:00 PM – 03:00 PM	4	Module 2: Managerial Accounting and Cost Analysis
	03:00 PM – 04:00 PM	5	Principles of managerial accounting
	04:00 PM – 05:00 PM	6	Cost behaviors, cost analysis, and budgeting
15.11.2019	02:00 PM – 03:00 PM	7	Module 3: Financial Statement Analysis
	03:00 PM – 04:00 PM	8	Techniques for analyzing financial statements
	04:00 PM – 05:00 PM	9	Ratios and metrics for assessing company performance
16.11.2019	02:00 PM – 03:00 PM	10	Module 4: Accounting Information Systems
	03:00 PM – 04:00 PM	11	Overview of accounting information systems (AIS)
	04:00 PM – 05:00 PM	12	Implementation and management of AIS in organizations
18.11.2019	02:00 PM – 03:00 PM	13	Module 5: Corporate Finance Fundamentals
	03:00 PM – 04:00 PM	14	Principles of corporate finance
	04:00 PM – 05:00 PM	15	Capital budgeting, risk management, and capital structure

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

19.11.2019	02:00 PM – 03:00 PM	16	Module 6: Financial Planning and Analysis
	03:00 PM – 04:00 PM	17	Techniques for financial planning and forecasting
	04:00 PM – 05:00 PM	18	Scenario analysis and financial modeling
20.11.2019	02:00 PM – 03:00 PM	19	Module 7: Advanced Accounting Topics
	03:00 PM – 04:00 PM	20	Complex accounting issues such as revenue recognition, leases, and consolidations
	04:00 PM – 05:00 PM	21	International Financial Reporting Standards (IFRS) vs. Generally Accepted Accounting Principles (GAAP)
21.11.2019	02:00 PM – 03:00 PM	22	Module 8: Auditing and Internal Controls
	03:00 PM – 04:00 PM	23	Basics of auditing processes and procedures
	04:00 PM – 05:00 PM	24	Designing and implementing internal controls to prevent fraud and ensure accuracy
22.11.2019	02:00 PM – 03:00 PM	25	Module 9: Taxation and Compliance
	03:00 PM – 04:00 PM	26	Overview of tax regulations and compliance requirements
	04:00 PM – 05:00 PM	27	Corporate tax planning and personal taxation considerations
23.11.2019	02:00 PM – 03:00 PM	28	Module 10: Capstone Project: Financial Analysis and Reporting Application of course concepts to a real-world financial analysis project
	03:00 PM – 04:00 PM	29	Comprehensive report and presentation of findings based on financial data
	04:00 PM – 05:00 PM	30	Final Exam

HOD
Dept. of Business Management
Aurora's P.G College, Uppal

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

1.2.1. Certificate/Value Added Courses

Timetables

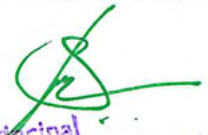## 42. Training Program on SQL and Database Design

Training Program on SQL & Database Design
Organized by Department of Computer Applications

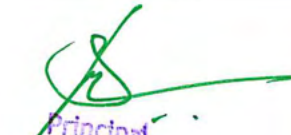**Duration: 16.12.2019 to 28.12.2019**

Time Table

Day	Time	Session	Topic
16.12.2019	02:00 PM – 03:00 PM	1	Module 1: Introduction to Databases and SQL
	03:00 PM – 04:00 PM	2	Overview of Databases and RDBMS Introduction to SQL and its importance in data management
	04:00 PM – 05:00 PM	3	Data types and table creation
17.12.2019	02:00 PM – 03:00 PM	4	Module 2: Database Design Concepts Relational database design principles
	03:00 PM – 04:00 PM	5	Entity-Relationship (ER) models
	04:00 PM – 05:00 PM	6	Primary and foreign keys Data integrity and constraints
18.12.2019	02:00 PM – 03:00 PM	7	Module 3: SQL Basics Writing simple SQL queries
	03:00 PM – 04:00 PM	8	SELECT, FROM, WHERE clauses
	04:00 PM – 05:00 PM	9	Filtering, sorting, and basic functions
19.12.2019	02:00 PM – 03:00 PM	10	Module 4: Advanced SQL Queries Joins: Inner, Outer, and Cross Joins
	03:00 PM – 04:00 PM	11	Subqueries and nested queries
	04:00 PM – 05:00 PM	12	SQL functions and grouping (GROUP BY, HAVING)
20.12.2019	02:00 PM – 03:00 PM	13	Module 5: Data Manipulation and Transactions Inserting, updating, and deleting data
	03:00 PM – 04:00 PM	14	Transaction control (COMMIT, ROLLBACK, SAVEPOINT)
	04:00 PM – 05:00 PM	15	Handling concurrent transactions and isolation levels

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

Date	Time	No.	Topic
21.12.2019	02:00 PM – 03:00 PM	16	Module 6: Database Normalization Introduction to normalization
	03:00 PM – 04:00 PM	17	1NF, 2NF, 3NF, and higher normal forms
	04:00 PM – 05:00 PM	18	Denormalization and its uses
23.12.2019	02:00 PM – 03:00 PM	19	Module 7: Indexing and Performance Tuning Importance of indexing in SQL
	03:00 PM – 04:00 PM	20	Creating and managing indexes
	04:00 PM – 05:00 PM	21	Performance optimization techniques
24.12.2019	02:00 PM – 03:00 PM	22	Module 8: Database Security User roles and privileges
	03:00 PM – 04:00 PM	23	Implementing security measures in SQL
	04:00 PM – 05:00 PM	24	Protecting sensitive data
27.12.2019	02:00 PM – 03:00 PM	25	Module 9: Views and Stored Procedures Creating and using views for simplified queries
	03:00 PM – 04:00 PM	26	Stored procedures and their use in database applications
	04:00 PM – 05:00 PM	27	Triggers and event handling
28.12.2019	02:00 PM – 03:00 PM	28	Module 10: Database Backup and Recovery Designing effective backup strategies
	03:00 PM – 04:00 PM	29	Restoring databases and disaster recovery planning Database scalability and replication
	04:00 PM – 05:00 PM	30	Final Exam

HOD
Dept. of Computer Applications
Aurora's P.G College, Uppal

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

1.2.1. Certificate/Value Added Courses

Timetables

43. Certificate Program on Design Thinking and Innovation

Certificate Program on Design Thinking and Innovation

Organized by Department of Business Management
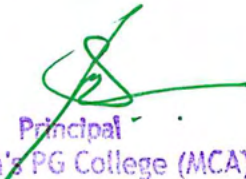
Duration: 16.12.2019 to 28.12.2019

Time Table

Day	Time	Session	Topic
16.12.2019	02:00 PM – 03:00 PM	1	Module 1: Introduction to Design Thinking Overview of Design Thinking
	03:00 PM – 04:00 PM	2	Historical Background and Evolution
	04:00 PM – 05:00 PM	3	Key Principles and Phases of Design Thinking
17.12.2019	02:00 PM – 03:00 PM	4	Module 2: Empathy and Understanding the User Techniques for Empathy Research (Interviews, Observations)
	03:00 PM – 04:00 PM	5	Identifying User Needs and Pain Points
	04:00 PM – 05:00 PM	6	Creating User Personas and Journey Maps
18.12.2019	02:00 PM – 03:00 PM	7	Module 3: Defining the Problem Techniques for Problem Definition
	03:00 PM – 04:00 PM	8	Crafting Problem Statements and Point-of-View (POV) Statements
	04:00 PM – 05:00 PM	9	Aligning Problem Statements with User Needs
19.12.2019	02:00 PM – 03:00 PM	10	Module 4: Ideation Techniques Brainstorming and Creativity Techniques
	03:00 PM – 04:00 PM	11	Divergent and Convergent Thinking
	04:00 PM – 05:00 PM	12	Idea Selection and Prioritization
20.12.2019	02:00 PM – 03:00 PM	13	Module 5: Prototyping and Experimentation Prototyping Methods (Low-Fidelity vs. High-Fidelity)
	03:00 PM – 04:00 PM	14	Tools and Techniques for Rapid Prototyping
	04:00 PM – 05:00 PM	15	Conducting Effective Experiments and Iterations

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

21.12.2019	02:00 PM – 03:00 PM	16	Module 6: Testing and Feedback Methods for Gathering User Feedback
	03:00 PM – 04:00 PM	17	Analyzing Feedback and Insights
	04:00 PM – 05:00 PM	18	Refining Prototypes Based on Testing
23.12.2019	02:00 PM – 03:00 PM	19	Module 7: Innovation Strategies Applying Design Thinking to Business Strategy
	03:00 PM – 04:00 PM	20	Scaling and Implementing Innovative Solutions
	04:00 PM – 05:00 PM	21	Case Studies of Successful Innovations
24.12.2019	02:00 PM – 03:00 PM	22	Module 8: Collaborative Design and Team Dynamics Building and Leading Creative Teams
	03:00 PM – 04:00 PM	23	Facilitating Collaborative Workshops and Sessions
	04:00 PM – 05:00 PM	24	Managing Team Dynamics and Conflict
27.12.2019	02:00 PM – 03:00 PM	25	Module 9: Design Thinking in Practice Applying Design Thinking to Real-World Problems
	03:00 PM – 04:00 PM	26	Group Projects: Identifying, Designing, and Implementing Solutions
	04:00 PM – 05:00 PM	27	Presenting and Pitching Solutions
28.12.2019	02:00 PM – 03:00 PM	28	Module 10: Future Trends and Impacts Emerging Trends in Design Thinking and Innovation
	03:00 PM – 04:00 PM	29	The Role of Design Thinking in Social and Technological Change Developing a Personal and Organizational Innovation Mindset
	04:00 PM – 05:00 PM	30	Final Exam

HOD
Dept. of Business Management
Aurora's P.G College, Uppal

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

1.2.1. Certificate/Value Added Courses

Timetables

44. Certificate Program on Human Resources

Certificate Program on Human Resources

Organized by Department of Business Administration

Duration: 02.01.2020 to 10.01.2020

Time Table

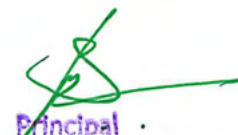| Day	Time	Session	Topic
02.01.2020	02:00 PM – 03:00 PM	1	Module 1: Introduction to Human Resources Management HR roles and responsibilities.
	03:00 PM – 04:00 PM	2	HR's strategic role in business. Evolution of HR practices.
	04:00 PM – 05:00 PM	3	Module 2: Recruitment and Selection Recruitment strategies and sourcing candidates
03.01.2020	02:00 PM – 03:00 PM	4	Selection processes and interviewing techniques. On boarding and orientation programs.
	03:00 PM – 04:00 PM	5	Module 3: Performance Management Performance appraisal methods.
	04:00 PM – 05:00 PM	6	Setting performance goals and objectives. Providing feedback and managing performance issues.
04.01.2020	02:00 PM – 03:00 PM	7	Module 4: Employee Development and Training Training needs assessment.
	03:00 PM – 04:00 PM	8	Developing and delivering training programs. Career development and succession planning
	04:00 PM – 05:00 PM	9	Module 5: Compensation and Benefits Salary structures and pay scales.
06.01.2020	02:00 PM – 03:00 PM	10	Benefits administration (healthcare, retirement plans).
	03:00 PM – 04:00 PM	11	Compensation strategies and benchmarking.
	04:00 PM – 05:00 PM	12	Module 6: Employment Laws and Ethics Employment laws and regulations (e.g., FMLA, ADA, EEOC).
07.01.2020	02:00 PM – 03:00 PM	13	Ethical considerations in HR practices.
	03:00 PM – 04:00 PM	14	Compliance and risk management.
	04:00 PM – 05:00 PM	15	Module 7: HR Analytics and Metrics Key HR metrics and KPIs.

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

08.01.2020	02:00 PM – 03:00 PM	16	Data collection and analysis techniques. Applying analytics to improve HR practices.
	03:00 PM – 04:00 PM	17	Module 8: Employee Relations and Workplace Culture Conflict resolution and grievance handling.
	04:00 PM – 05:00 PM	18	Employee engagement and motivation.
09.01.2020	02:00 PM – 03:00 PM	19	Creating and maintaining a positive workplace culture
	03:00 PM – 04:00 PM	20	Module 9: HR Policies and Procedures Policy creation and documentation.
	04:00 PM – 05:00 PM	21	Implementing and communicating HR policies. Policy compliance and enforcement
10.01.2020	02:00 PM – 03:00 PM	22	Module 10: Diversity, Equity, and Inclusion (DEI) DEI principles and best practices.
	03:00 PM – 04:00 PM	23	Developing and implementing DEI programs. Measuring the impact of DEI initiatives.
	04:00 PM – 05:00 PM	24	Final Exam

HOD
Dept. of Business Management
Aurora's P.G College, Uppal

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

1.2.1. Certificate/Value Added Courses

Timetables

45. Certificate Program on BlockChain and Cryptocurrency

AURORA'S PG COLLEGE (MCA)
Peerzadiguda, Uppal, Hyderabad-500092

Certificate Program on Block Chain and Crypto Currency
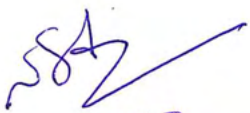### Organized by Department of Computer Applications
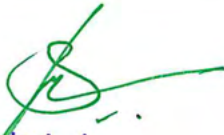
Duration: 03.02.2020 to 14.02.2020

Time Table

Day	Time	Session	Topic
03.02.2020	02:00 PM – 03:00 PM	1	Module 1: Introduction to Block chain Technology Overview of Block chain
	03:00 PM – 04:00 PM	2	Block chain Architecture and Components
	04:00 PM – 05:00 PM	3	Types of Block chain (Public, Private, Consortium)
04.02.2020	02:00 PM – 03:00 PM	4	Module 2: Block chain Consensus Mechanisms Proof of Work (PoW) and Proof of Stake (PoS)
	03:00 PM – 04:00 PM	5	Other Consensus Mechanisms (Delegated Proof of Stake, Practical Byzantine Fault Tolerance)
	04:00 PM – 05:00 PM	6	Consensus Mechanisms Comparison and Use Cases
05.02.2020	02:00 PM – 03:00 PM	7	Module 3: Crypto currencies Fundamentals History and Evolution of Crypto currencies
	03:00 PM – 04:00 PM	8	How Crypto currencies Work (Mining, Wallets, Transactions)
	04:00 PM – 05:00 PM	9	Major Crypto currencies (Bitcoin, Ethereum, Altcoins)
06.02.2020	02:00 PM – 03:00 PM	10	Module 4: Smart Contracts and Decentralized Applications (D Apps) Introduction to Smart Contracts
	03:00 PM – 04:00 PM	11	Developing and Deploying Smart Contracts on Ethereum
	04:00 PM – 05:00 PM	12	Building Decentralized Applications (D Apps)
07.02.2020	02:00 PM – 03:00 PM	13	Module 5: Block chain Platforms and Tools Overview of Block chain Platforms (Ethereum, Hyperledger, Binance Smart Chain)
	03:00 PM – 04:00 PM	14	Development Tools and Frameworks (Solidity, Truffle, Remix)
	04:00 PM – 05:00 PM	15	Hands-on Labs with Block chain Platforms

Principal
Aurora's PG College (MCA)
Uppal, Hyderabad-500092

10.02.2020	02:00 PM – 03:00 PM	16	Module 6: Crypto currency Trading and Investment Crypto currency Exchanges and Trading Platforms
	03:00 PM – 04:00 PM	17	Analyzing Crypto currency Markets and Price Trends
	04:00 PM – 05:00 PM	18	Investment Strategies and Risk Management
11.02.2020	02:00 PM – 03:00 PM	19	Module 7: Security in Block chain and Crypto currency Block chain Security Fundamentals
	03:00 PM – 04:00 PM	20	Common Vulnerabilities and Attacks (51% Attack, Smart Contract Vulnerabilities)
	04:00 PM – 05:00 PM	21	Best Practices for Securing Block chain Applications
12.02.2020	02:00 PM – 03:00 PM	22	Module 8: Regulatory and Legal Aspects of Block chain and Crypto currency Overview of Regulatory Frameworks (KYC/AML, GDPR, SEC Regulations)
	03:00 PM – 04:00 PM	23	Compliance Issues and Challenges
	04:00 PM – 05:00 PM	24	. Legal Considerations for Block chain Projects
13.02.2020	02:00 PM – 03:00 PM	25	Module 9: Block chain Use Cases and Applications Block chain in Supply Chain Management
	03:00 PM – 04:00 PM	26	Block chain for Digital Identity and Voting
	04:00 PM – 05:00 PM	27	. Case Studies of Successful Block chain Implementations
14.02.2020	02:00 PM – 03:00 PM	28	Module 10: Future Trends and Innovations in Block chain and Crypto currency Emerging Trends and Technologies
	03:00 PM – 04:00 PM	29	The Future of Block chain and Crypto currency
	04:00 PM – 05:00 PM	30	Final Exam