What is Bignalytics?

Bignalytics is a premier Indore-based training institute dedicated to preparing future-ready professionals in Data Science, Machine Learning, Artificial Intelligence, and Data Analytics through industry-focused, hands-on education.

Key Highlights:

- Founded in 2019 by IITians and PhD professionals with over 20 years of IT experience.
- Expertise in high-demand fields including Data Science, Machine Learning, Artificial Intelligence, and Data Analytics.
- Flexible learning formats available in both classroom and offline modes.
- Application-driven curriculum with project-based and case-study instruction.
- Industry-aligned training that bridges the gap between academic theory and practical requirements.
- Career-focused outcomes designed to equip students and professionals with job-ready skills in today's data-driven world.

Why Should You Join Bignalytics?

Join Bignalytics to build a strong, future-proof career in Data Analytics, Artificial Intelligence, Machine Learning, and Data Science—with training that's practical, current, and industry-aligned.

1. **Expert Faculty** – Learn from highly qualified and experienced educators.
2. **Structured Curriculum** – Comprehensive and well-designed study plans.
3. **Modern Learning Techniques** – Smart classrooms, online support, and interactive sessions.
4. **Regular Assessments** – Mock tests, doubt-solving sessions, and performance tracking.
5. **Success-Oriented Approach** – Proven strategies to excel in interviews and competitive exams.

Where is Bignalytics Located?

Address: 204, Pearl Business Park, 3-Vishnupuri, iBus Stop, Above Ramesh Dosa, Bhawarkua Main Road, Indore, Madhya Pradesh

How to Contact Bignalytics?

- **Phone:** 093992-00960
- **Email:** contact@bignalytics.in
- **Website:** www.bignalytics.in

What Are the Institute's Operating Hours?

Bignalytics Operating Hours:

- Monday to Saturday: 11:00 AM – 8:00 PM
- Sunday: Closed

The institute remains open throughout the week (except Sundays) for classes, lab sessions, and individual practice.

What Is the Class Schedule and Lab Session Structure?

Bignalytics follows a structured and flexible learning model to maximize student engagement and hands-on exposure.

Class & Lab Schedule:

1. Classes are held three days a week, typically on either Monday–Wednesday or Thursday–Saturday, based on batch allocation.
2. Lab sessions are conducted on the alternate three days, giving students dedicated time for practical learning.
3. Students are welcome to visit the institute Monday through Saturday for lab practice, faculty interaction, or doubt clearing.
4. Operating hours for all sessions are from 11:00 AM to 8:00 PM.
5. Faculty support is available daily for academic guidance, doubt resolution, and mentoring.

Two demo classes are provided free of cost for new or prospective students.

Bignalytics Roadmap

At Bignalytics, our comprehensive program is structured into **10 progressive levels**, designed to systematically build your expertise from foundational skills to advanced AI deployment and job placement readiness. This roadmap ensures you develop both technical depth and industry-relevant knowledge at every stage.

Here are the **10 Levels** of the Bignalytics Program:

1. **Level 1:** Python Programming (DA, DS, and AI)
2. **Level 2:** Data Visualization and Exploratory Data Analysis (EDA) (DA, DS, and AI)
3. **Level 3:** Advanced Excel for Business (DA, DS, and AI)
4. **Level 4:** Business Implementation of Statistics (DA, DS, and AI)
5. **Level 5:** SQL and Python for Effective Data Analysis (DA, DS, and AI)
6. **Level 6:** Unsupervised Machine Learning (DS and AI only)
7. **Level 7:** Supervised Machine Learning (DS and AI only)
8. **Level 8:** Deployment of Machine Learning Models (AI only)
9. **Level 9:** Advanced Deep Learning and Natural Language Processing (AI only)
10. **Level 10:** Job Placement Toolkit and Support (DA, DS, and AI)

Each level includes **hands-on projects, real-world applications, and skill-specific outcomes** tailored to different tracks: Data Analytics, Data Science, and Artificial Intelligence.

Bignalytics Roadmap to Your Success

Level 1: Python Programming (DA, DS, and AI)

- Introduction to Python
- Data Types and Variables
- Control Structures (if, else, loops)
- Functions and Modules
- Exception Handling
- File Handling
- Data Structures (Lists, Tuples, Dictionaries)
- Object-Oriented Programming (Classes and Objects)
- Error Handling and Debugging
- Python Best Practices and Code Optimization
- Project Work and Assignments

Level 2: Data Visualization and Exploratory Data Analysis (EDA) (DA, DS, and AI)

- Introduction to Data Visualization
- Data Visualization Principles and Best Practices
- Exploratory Data Analysis (EDA) with Python Libraries
- Creating Basic Visualizations with Matplotlib
- Advanced Data Visualization with Seaborn
- Introduction to Power BI for Data Visualization
- Connecting Data Sources to Power BI
- Building Basic Visualizations in Power BI
- Creating Interactive Dashboards in Power BI
- Data Transformation and Modeling in Power BI
- Advanced Visualizations in Power BI
- Introduction to DAX
- Combining Python Code with Power BI (Python Visualization)
- Sharing, Publishing, and Collaborating with Power BI Services
- Project Work and Assignments

Level 3: Advanced Excel for Business (DA, DS, and AI)

- Navigation, Cells, Ranges, and Formatting

- Formulas: SUM, AVERAGE, COUNT, IF, VLOOKUP
- Sorting, Filtering, and Freezing Panes
- Applying Colour Scales, Data Bars, and Icon Sets
- Pivot Tables and Pivot Charts
- Advanced Formulas: INDEX-MATCH, OFFSET, and Array Formulas
- Importing, Transforming, and Cleaning Data
- Managing Large Datasets and Creating Data Models
- Dynamic Charts, Sparklines, and Dashboards

Level 4: Business Implementation of Statistics (DA, DS, and AI)

- Descriptive vs. Inferential Statistics
- Data Types and Scales of Measurement
- Measures of Central Tendency (Mean, Median, Mode)
- Measures of Variability (Variance, Standard Deviation, Range)
- Probability Basics and Distributions (Normal, Binomial, Poisson)
- Sampling Techniques and Sampling Distributions
- Confidence Intervals and Margin of Error
- Hypothesis Testing (Null and Alternative Hypotheses)
- p-Values and Significance Levels
- Types of Errors (Type I and Type II Errors)
- Chi-Square Tests for Categorical Data
- Correlation vs. Causation
- Project Work and Assignments

Level 5: SQL and Python for Effective Data Analysis (DA, DS, and AI)

- Introduction to SQL and Relational Databases
- Basic SQL Syntax (SELECT, FROM, WHERE)
- Sorting and Filtering Data (ORDER BY, WHERE)
- Data Aggregation (GROUP BY, HAVING)
- Table Joins (INNER JOIN, LEFT JOIN)
- Subqueries and Nested Queries
- Data Modification (INSERT, UPDATE, DELETE)
- Creating and Modifying Tables (CREATE, ALTER)
- Indexing and Optimization

- Introduction to Python Database APIs
- Fetching and Manipulating Data in Python
- Real-World Applications of SQL and Python
- Project Work and Assignments

Level 6: Unsupervised Machine Learning (DS and AI only)

- Introduction to Unsupervised Learning
- Clustering Algorithms (K-Means, Hierarchical, DBSCAN)
- Dimensionality Reduction (PCA, T-SNE)
- Feature Scaling and Standardization
- Hierarchical Clustering and Dendrograms
- Density-Based Clustering (DBSCAN)
- Evaluation Metrics for Clustering
- Real-World Applications of Unsupervised Learning
- Project Work and Assignment

Level 7: Supervised Machine Learning (DS and AI only)

- Introduction to Supervised Learning
- Types of Supervised Learning (Classification and Regression)
- Linear and Logistic Regression
- Decision Trees and Random Forests
- Support Vector Machines (SVM)
- K-Nearest Neighbors (KNN)
- Naive Bayes Classifier
- Gradient Boosting (e.g., XGBoost)
- Model Evaluation Metrics
- Data Preprocessing and Feature Engineering
- Overfitting and Regularization
- Hyperparameter Tuning
- Real-World Applications of Supervised Learning
- Project Work and Assignments

Level 8: Deployment of Machine Learning Models (AI only)

- Git and GitHub for Version Control
- AWS Cloud Deployment

- Flask and Django Web Frameworks
- RESTful API Development
- Docker Containerization
- CI/CD Pipelines
- Model Versioning Strategies
- Model Performance Monitoring
- Scalability in Cloud Environments
- Project Work and Assignments

Level 9: Advanced Deep Learning and Natural Language Processing (AI only)

- Introduction to Deep Learning
- Neural Network Fundamentals
- Introduction to Natural Language Processing (NLP)
- Text Preprocessing Techniques
- Word Embeddings (Word2Vec, GloVe)
- LSTM Networks and Sequence Modeling
- Text Classification with LSTM
- Sentiment Analysis with LSTM
- Named Entity Recognition (NER)
- Sequence-to-Sequence Models (Seq2Seq)
- Attention Mechanisms in NLP
- Transformers and Hugging Face Models
- GPT-3.5 and Advanced Language Models (LLMs)
- NLP Model Assessment and Evaluation Techniques
- Project Work and Assignments

Level 10: Job Placement Toolkit and Support (DA, DS, and AI)

- Resume Building and Optimization
- Best Practices for CV and Online Profiles
- LinkedIn Profile Optimization
- Naukri.com Profile Enhancement
- Interview Preparation Guide
- Interview Question Bank
- Technical Interviews and Coding Challenges

- Mock Interviews and Practice Sessions
- Peer Networking Strategies
- Negotiating Data Science Job Offers

Course Overview and Fee Structure for Session 2024 Q4

Bignalytics offers industry-relevant, career-driven Master's Programs with flexible pricing to accommodate both students and working professionals. Each program includes deep skill-building modules, project-based learning, and placement support.

1. Master's Program in Advanced Data Analytics

- **Duration:** 6 to 7 Months
- **Full Course Fee:** ₹44,000
- **Discounted Fee:** ₹33,000 (25% off)
- **Lump Sum Offer:** Additional ₹4,000 off
- **EMI Option:** 2 Installments

2. Master's Program in Data Science

- **Duration:** 8 to 9 Months
- **Full Course Fee:** ₹60,000
- **Discounted Fee:** ₹45,000 (25% off)
- **Lump Sum Offer:** Additional ₹5,500 off
- **EMI Option:** 3 Installments

3. Master's Program in Data Science & Machine Learning

- **Duration:** 12 to 14 Months
- **Full Course Fee:** ₹74,000
- **Discounted Fee:** ₹55,500 (25% off)
- **Lump Sum Offer:** Additional ₹6,000 off
- **EMI Option:** 3 Installments

Program Overview – Master's in Advanced Data Analytics

Course Summary: This intensive, application-first program is tailored for professionals looking to master modern data analytics, business intelligence, and visualization. It bridges theory with hands-on implementation using real-world business data.

Why Learn Advanced Data Analytics? In today's digital economy, data analytics is the foundation of decision-making across sectors like finance, healthcare, retail, and consulting. High-demand roles include:

- Data Analyst
- Business Analyst

- BI Developer
- Data Scientist

Key Skills & Tools Covered:

1. **Python for Data Analysis** – NumPy, Pandas, Matplotlib
2. **SQL & Databases** – MySQL, PostgreSQL, SQL Server
3. **Power BI** – Dynamic dashboards, DAX, interactive visuals
4. **Excel for Analytics** – PivotTables, advanced formulas, VBA
5. **ETL Processes** – Data cleaning and transformation in Python
6. **Statistics** – Hypothesis testing, probability, modeling
7. **Business Intelligence Reporting** – Strategy-aligned dashboards

Ideal for:

- Freshers and graduates
- Working professionals in IT, Finance, HR, Marketing
- Career switchers into data roles

Duration: 6 to 7 months **Mode:** Online or Offline (Indore Campus) **Contact:** +91 93992 00960 | **Website:** www.bignalytics.in

Program Overview – Master's in Data Science & Data Analytics

Course Summary: This hybrid program combines foundational analytics with advanced data science applications and tools. It prepares learners for diverse roles by focusing on end-to-end data pipelines, machine learning, and BI tools.

Why Learn Data Science & Analytics? Organizations are leveraging data to:

- Predict customer behavior
- Enhance business efficiency
- Optimize marketing and product strategies

Career Outcomes:

- Data Scientist
- BI Analyst
- AI Specialist
- Data Engineer
- Machine Learning Engineer

Key Skills & Tools Covered:

1. **Python & R** – NumPy, Seaborn, Matplotlib
2. **SQL & NoSQL** – MySQL, PostgreSQL, MongoDB

3. **Power BI & Tableau** – Dashboarding and storyboards
4. **Machine Learning & AI** – Scikit-learn, TensorFlow, Keras
5. **Big Data & Cloud Platforms** – Spark, Hadoop, AWS, Azure
6. **Statistics & Probability** – Hypothesis testing, modeling
7. **ETL & Data Wrangling** – Python, SQL, OpenRefine
8. **NLP** – Sentiment analysis, chatbot development
9. **Time Series Forecasting** – ARIMA, Prophet
10. **Business Intelligence** – Translating analytics to strategy

Ideal for:

- Aspiring Data Scientists and Analysts
- Software developers transitioning into data
- Marketing, finance, and analytics professionals
- Students looking to upskill in advanced analytics

Duration: 8 to 9 months **Mode:** Online or Offline (Indore Campus) **Contact:** +91 93992 00960 | **Website:** www.bignalytics.in

Program Overview – Master's in Artificial Intelligence & Machine Learning

Course Summary: This advanced, project-driven AI/ML program focuses on enabling participants to build, deploy, and scale intelligent systems. It provides practical exposure to cutting-edge techniques in deep learning, NLP, computer vision, and AI ethics.

Why Learn AI & ML? AI is shaping the future of:

- Smart healthcare
- Automated logistics
- Fraud detection
- Personalized marketing
- Virtual assistants

Career Opportunities:

- AI Engineer
- ML Engineer
- Data Scientist
- AI Researcher
- Product Manager (AI-driven)

Key Skills & Tools Covered:

1. **Python & R for AI/ML** – Numpy, Pandas, Matplotlib

2. **Machine Learning** – Scikit-learn, Regression, Classification
3. **Deep Learning** – TensorFlow, Keras, PyTorch
4. **Computer Vision** – OpenCV, YOLO, CNNs
5. **NLP** – NLTK, SpaCy, BERT, Sentiment Analysis
6. **Big Data & Cloud AI** – Hadoop, Google AI, AWS AI, Azure ML
7. **Reinforcement Learning** – Q-learning, OpenAI Gym
8. **AI Ethics & Explainability** – SHAP, LIME
9. **Time Series Modeling** – ARIMA, Prophet, LSTM
10. **Deployment** – Flask, FastAPI, Docker, CI/CD pipelines

Ideal for:

- AI/ML aspirants and engineers
- Software developers pivoting to AI
- Product managers and business professionals targeting intelligent systems
- Students with technical backgrounds

Duration: 12 to 14 months **Mode:** Online or Offline (Indore Campus) **Contact:** +91 93992 00960 | **Website:** www.bignalytics.in

📘 **BIGNALYTICS KNOWLEDGE BASE: DATA ANALYTICS | DATA SCIENCE | AI | ML**

Structured Information for Career Aspirants & Professionals

What is Data Analytics?

Definition: Data Analytics is the process of collecting, organizing, transforming, and analyzing raw data to generate actionable insights, make informed decisions, and forecast future trends. It encompasses four major types:

- **Descriptive Analytics:** What happened?
- **Diagnostic Analytics:** Why did it happen?
- **Predictive Analytics:** What is likely to happen?
- **Prescriptive Analytics:** What actions should be taken?

What Common Tools Are Used in Data Analytics?

- **Spreadsheet & BI Tools:** Microsoft Excel, Power BI, Tableau
- **Programming & Querying Languages:** SQL, Python, R
- **Advanced Platforms:** KNIME, Zoho Analytics, Alteryx

What Do Data Analysts Actually Do?

- Source and clean datasets from various platforms
- Perform exploratory and statistical data analysis

- Build dashboards, charts, and data stories
- Deliver reports that support business operations and decision-making

Career Opportunities in Data Analytics

- Data Analyst
- Business Intelligence Analyst
- Marketing Analyst
- Financial Analyst
- Operations Analyst
- Data Engineer (entry into engineering path)

Sample Interview Questions – Data Analytics

- What is VLOOKUP? What are its limitations?
- How would you identify and remove duplicate data in Excel or SQL?
- Explain descriptive vs. inferential statistics.
- Share an example of applying statistics in a business problem.

What is Data Science?

Definition: Data Science is an interdisciplinary domain that merges statistics, computer science, domain knowledge, and data engineering to extract insights from complex structured and unstructured data using predictive analytics, machine learning, and AI.

What Common Tools Are Used in Data Science?

- **Core Languages:** Python (NumPy, Pandas, Scikit-learn), R
- **IDE/Notebooks:** Jupyter, Google Colab
- **ML/AI Libraries:** TensorFlow, PyTorch
- **AutoML Tools:** DataRobot, TIBCO, Weka

What Do Data Scientists Actually Do?

- Gather, clean, and preprocess large data sets
- Perform exploratory data analysis and statistical modeling
- Design and implement machine learning models
- Collaborate with stakeholders to align data initiatives with business goals

Career Opportunities in Data Science

- Data Scientist
- Machine Learning Engineer
- Data Engineer
- Business Data Scientist

- Research Scientist

Sample Interview Questions – Data Science

- What is the lifecycle of a data science project?
- Techniques to handle missing data?
- Define feature engineering with examples.
- Difference between supervised and unsupervised learning?

What Is the Use of Artificial Intelligence (AI)?

AI enables machines to mimic human-like capabilities including reasoning, learning, decision-making, and perception. Applications range from automation to complex tasks like computer vision, speech recognition, and natural language understanding.

Common Tools Used in Artificial Intelligence

- **Deep Learning:** TensorFlow, PyTorch, Keras
- **Cloud AI Platforms:** Microsoft Azure AI, Google Cloud AI, IBM Watson
- **ML Libraries:** Scikit-learn

What Do AI Professionals Do?

- Design intelligent algorithms and learning models
- Develop AI-enabled applications (e.g., chatbots, recommendation systems)
- Optimize and deploy AI pipelines
- Contribute to AI research and innovation

Career Opportunities in AI

- AI Engineer
- AI Research Scientist
- NLP Engineer
- Computer Vision Engineer
- Robotics Engineer

Sample Interview Questions – Artificial Intelligence

- How is AI different from ML and Deep Learning?
- How do neural networks function?
- Discuss ethical concerns in AI systems.
- Define reinforcement learning and give real-world examples.

What is the Use of Machine Learning?

Machine Learning focuses on building systems that learn from data and make predictions or automate decisions without explicit programming for each scenario. It is foundational for AI-driven development.

Common Tools Used in Machine Learning

- Scikit-learn, XGBoost
- TensorFlow, Keras, PyTorch
- H2O.ai, Apache Spark MLlib

What Do Machine Learning Engineers Actually Do?

- Build and deploy predictive models
- Perform feature engineering and data wrangling
- Monitor model performance and manage lifecycle (MLOps)
- Integrate models into production software using APIs

Career Opportunities in Machine Learning

- ML Engineer
- AI Product Manager
- Data Scientist
- ML Researcher

Sample Interview Questions – Machine Learning

- Types of machine learning and real-life applications
- How do you address overfitting in models?
- Classification vs. regression
- What is cross-validation and why is it crucial?

S **Final Note:** Each field offers scalable career growth. The key is a strong foundation in math, statistics, programming, and domain awareness—paired with the right tools and project exposure.

What about the Placement?

Our placement support is comprehensive and student-focused. We assist you in building and optimizing your profiles on Naukri, LinkedIn, and Indeed, and provide personal guidance for career planning. The placement cell conducts mock interviews, resume workshops, and technical training to boost your confidence and skills. Students also gain valuable experience through live projects and internship opportunities, ensuring they are job-ready. Thanks to our dedicated guidance and the hard work of our students, many have been successfully placed in reputed companies.

How many students got placed?

32 students successfully secured placements.

Which job roles did they get placed in?

- Engineer
- Data Scientist
- Python Developer
- Data Analyst
- Business Analyst
- Data Engineer
- Software Developer
- MIS Executive
- Project Manager (Analytics)
- Senior Consultant (Business Analytics)
- Senior Business Analyst
- Software Trainer
- Data Science (Gen AI Engineer)

Students got placed as AI Engineers?

- Nishika Pandey, SmartGig, Hyderabad – 5.79 LPA
- Vanshita Vani, Hiteshi Infotech – Salary Not Mentioned

How many students got placed as Data Scientists?

- Ankur Joshi, GenioTal Pvt Ltd / MorcYeahs – 5 LPA
- Mayank Jain, MapMyIndia, Bangalore – 3.5 LPA
- Aditya Desai, Infomiez Technologies – Salary Not Mentioned
- Pooja Jaiswal, C9 Lab – Salary Not Mentioned
- Parth Prajapat, BrainSight AI / Ipangram, Surat – Salary Not Mentioned
- Janhavi Pandit, AIC Prestige – Salary Not Mentioned
- Harshit Chourasiya, Self-employed – Salary Not Mentioned

How many students got placed as Python Developers?

- Mufaddal Sethwala, Company Not Mentioned – 4 LPA
- Prateek Choukikar, D3V Technology, Hyderabad – 3 LPA

How many students got placed as Data Analysts?

- Dhruv Pahuja, Kiyarl Group – 3 LPA
- Anbhav Adhar, Agarwal Metals – 4.2 LPA
- Harsh Rathore, Blu Moon Universal Pvt Ltd – 3.65 LPA
- Tajeshwar Solanki, Innovel Energy Services Pvt Ltd – Salary Not Mentioned

- Niranjan Karandikar, WM Universal Solutions India – 9.8 LPA
- Harshit Chourasiya, Self-employed – Salary Not Mentioned
- Janhavi Pandit, AIC Prestige – Salary Not Mentioned

How many students got placed as Business Analysts?

- Gaurav Sakar Yen, Ascendum Solutions – 7 LPA
- Suraj Sakariya, Ascendion Solutions – 7 LPA
- Shubham Rathore, Shriram Life Insurance – 4 LPA
- Arpit Bha, Jainson Infotech – 3.24 LPA

How many students got placed as Senior Business Analysts?

- Ishan Pandya, Nice Acmize – 150%+ hike

How many students got placed as Software Developers?

- Chetan Sahu, ExpertINASIA Pvt Ltd – Salary Not Mentioned
- Nancy Shrivastava, Tata Consultancy Services (TCS) – Salary Not Mentioned

How many students got placed as Data Engineers?

- Arpit Sahu, ZeeData Technology – Salary Not Mentioned

How many students got placed as MIS Executives?

- Rajni Bhadoriya, Green Energy Pvt Ltd – Salary Not Mentioned

How many students got placed as Project Managers (Analytics)?

- Aman Jain, Indus Tower – 4.35 LPA

How many students got placed as Senior Consultants (Business Analytics)?

- Satej Panditrao, Amnex Infotechnologies – 100%+ hike

How many students got placed as Software Trainers?

- Anjan Sarkar, AU Software Enterprise – 3 LPA

How many students got placed as Data Science (Gen AI Engineers)?

- Janhavi Pandit, AIC Prestige – Salary Not Mentioned

Common Queries (Core Responses the Chatbot Must Handle)

Admission Process:

"To enroll in any course at Bignalytics, you need to visit our institute in person with your Aadhar card. Verification is mandatory before registration is confirmed."

Payment & Refund Policy:

"You can reserve your seat by paying ₹1000. If you attend the demo class and choose not to proceed, this amount will be refunded. No refund is applicable post-demo."

Class Format:

"Classes are conducted online via the Bignalytics app. Occasionally, we organize offline sessions, but the standard mode is online-only."

Prerequisites:

"Each course level has specific prerequisites. These will be explained by our counselors during course onboarding to ensure you meet the skill requirements."

Certification:

"After completing each module, you'll be required to pass an exam. Upon success, you'll receive a certificate for that module. Failing modules restricts placement eligibility. Full certification and placement access are available only if all module exams are cleared."

Faculty Information:

"Our trainers are IIT alumni and PhD holders with deep industry and academic experience."

Batch Size:

"Each batch is limited to 20–25 students to ensure focused, high-quality learning and personalized attention."

Conversation Flow Logic

Follow-up Responses:

The bot should automatically generate context-based follow-ups. For example, if a user asks about payment, the bot should ask: "Would you like help with the payment link or details about refunds?"

FAQ Prioritization:

- **High Priority:** Admission, Payment, Certification, Placement
- **Medium Priority:** Class Format, Faculty, Prerequisites
- **Low Priority:** Batch Size, App Access, Timings

Handling Partial Information:

If a user gives an incomplete query (e.g., "I want to know about classes"), the bot should ask clarifying questions like: "Do you mean online vs offline format, timings, or batch structure?"

Context-Aware Responses:

- **For first-time users:** Provide full introductory guidance and key links.
- **For returning users:** Refer back to past interactions. Example: "Last time you asked about certification. Would you like to continue with that or explore placements?"

Additional Chatbot Features

Response Templates:

Use structured templates with a friendly tone. For example: "Here's what you need to know about [TOPIC]: [RESPONSE]. Would you like to explore anything else?"

Escalation Triggers:

If the query is complex, unclear, or requires human intervention (e.g., refund not processed, technical issue), the bot should say: "Let me connect you with one of our counselors for better assistance."

Conversation Memory:

The bot should remember the user's past queries such as course interests or batch preference and reuse that in future chats. Example: "Since you were exploring the Data Science track last time, here's the next step."

Error Handling:

If a query doesn't match known topics, the bot should reply: "I'm not sure I understand that yet. Let me connect you with support or you can rephrase your question."