.[REGEX]*

Software Services. Learn To Create



DATA ANALYTICS WITH AI & GENERATIVE AI SPECIALIZATION PROGRAM

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About The Program

At Regex Software, we focus on providing practical, **career-oriented Data Analytics Placement Program with AI** that bridges the gap between theoretical knowledge and industry requirements. Our program is designed for learners from diverse educational backgrounds, including BCA, B.Tech, MCA, B.Sc., B.Com., MBA, and other graduate programs. No prior professional analytics experience is required. With structured learning, guided practice, and real-world case studies, learners develop the technical and analytical skills needed to pursue careers in data analytics and business intelligence.



Our **Data Analytics Placement Program with AI** covers essential industry tools and technologies, including Excel, Power Query, SQL, Python, Pandas, Statistics, Exploratory Data Analysis (EDA), and Power BI. Learners gain practical experience in data cleaning, data transformation, SQL queries, dashboard development, data visualization, and business reporting. The program also introduces statistical reasoning, experiment interpretation, and foundational machine learning concepts to help learners understanal data patterns and business outcomes.

What makes our program valuable is its focus on combining analytical fundamentals with the responsible use of **Generative AI for Data Analytics**. Learners explore how AI tools can assist with writing SQL queries, generating Python code, explaining analytical results, summarizing business findings, and automating repetitive tasks. Equal importance is given to validating AI-generated outputs, checking calculations against source data, understanding limitations, and communicating insights accurately. Through practical projects, portfolio development, resume-building guidance, and mock interviews, learners prepare for roles such as Data Analyst, Junior Data Analyst, Business Intelligence Analyst, Reporting Analyst, MIS Analyst, Operations Analyst, and AI-enabled Data Analyst.

Mode:
Physical (Jaipur & Ahmedabad) or Online

Duration:
6 Months + 4 Months Additional Support

Participants:
18 – 20 per Batch

What you will Learn ?

- Python
- SQL
- Power BI
- Generative AI
- Agentic AI
- Excel
- Excel AI
- Machine Learning
- GitHub
- Data Warehousing
- AWS

Study Material

- E-Notes
- Assignments & Poll Tests
- Live Video Lectures
- Access to Recordings & Study Material
- Mentorship Support
- Minor Projects & Use Cases
- Work on Real-time Projects

Output

- Think out of the box
- Build expertise in Python, Machine Learning, SQL, Power BI, Excel, Excel AI, Generative AI, Agentic AI and AWS for deployment
- Understand ML model deployment with AWS
- Build projects across multiple technology domains
- Work on 10+ use cases and projects
- Deploy models using AWS and DevOps tools





Package Offered So Far

Minimum Package

3 LPA

Average Package

3.5 – 5 LPA



PLACEMENT PROCESS:



At **REGex Software,** we are committed to providing a structured and results-driven training approach to ensure your career success.

• Training & Performance Analysis:

- Your training will begin from day 1 of your joining, focusing on hands-on learning and practical implementation.
- Our team will analyze your performance based on assignments, projects and weekly assessments from the **second week onwards** and we will provide weekly feedback to help you improve.

• Mandatory Criteria for Placement Opportunities:

To be eligible for placement opportunities, you must meet the following criteria:

- ✅ **80%** attendance in live training sessions.
- ✅ **80%** completion and timely submission of assignments & projects.
- ✅ **80%** attendance in assessments, including tests, mock interviews, HR interviews and group discussions.

• Resume Preparation & Placement Process:

- Between **4 to 5 months,** our team will provide guidance on resume building and evaluate your resumes accordingly.
- After completing **75-80%** of the program, you will receive details about the placement opportunities based on your performance and company requirements.
- Placement opportunities will be provided **continuously via email, calls and WhatsApp groups,** depending on your performance.

• Placement Assurance & Refund Policy *(Applicable only for Indian Students Only):*

- This is a **Placement Assured Program**, with an additional **4-month post-program assistance.**
- **IT and Non-IT** Graduates will get a minimum assured package of **3 LPA** upon placement, and the maximum package will completely depend on your skills, performance and capabilities.
- In the event that you have attended & completed at least 80% of the program, submitted and finished at least 80% of the assignments, Tests, Mock Interviews & HR Interview and still do not secure a placement then REGEX will refund your fees. Furthermore, **Refunds are applicable only within the first 3 days of the demo period** and solely in cases where a specific concern is raised regarding the quality of the learning experience provided. You will receive an official confirmation mail from our team on the third day at 7:30 PM, confirming the completion of your demo period. Requests for a refund of the registration amount must be submitted prior to the issuance of this email. No refund requests will be entertained after this time and Even if you discontinue the program prematurely, you are still obligated to pay the full fee to REGex.
- **Our Commitment to Your Success:**

At REGex Software, Placement Assurance = Skills + Opportunities

We equip you with industry-relevant skills and provide continuous job opportunities based on your performance. However, it is **the student's responsibility** to crack interviews and enhance their skills based on feedback.

For additional support, we offer the flexibility to rejoin previous batches to reinforce concepts and improve understanding.

We are dedicated to your career success! 🚀

COURSE CONTENT:

WEEK 1

LINUX

- Introduction to Linux OS
- Basic Commands of Linux OS
- Vi editor
- Tar Archive
- User Management and permission

WEEK 1

GITHUB

- GitHub - Version control system
- Git vs GitHub
- Git commands
- Git Branches
- Branching and merging
- Git push vs pull commands

WEEK 2

C LOGICAL

- Mathematics for programming
- Data Types
- Variables
- Variable Scope (Local & Global)
- Constants

WEEK 3

C LOGICAL

- Operators
- Decision Making (if, if-else, switch)
- Loops (while, do-while, for)
- Basic I/O Functions

COURSE CONTENT:

WEEK 4

C LOGICAL

- Loops Revision (While, Do-While, For)
- Leetcode questions
- practice questions
- practice

WEEK 5

C LOGICAL

- Nested loops
- Advance patterns

WEEK 6

PYTHON

- Introduction to Python
- Data types
- Immutable vs Mutable data types
- String formatting & slicing
- Conditional Statements
- **Python MCQ Test - 50 Questions**

WEEK 7

PYTHON

- Introduction to looping statement for loop vs While loop
- String Data type
- String manipulation
- Sequential Data type
- List Vs Tuple
- Problem solving with List datatype

COURSE CONTENT:

DATABASE FUNDAMENTALS

- Tables, rows, columns, schemas
- Data types and primary/foreign keys
- Relational concepts

SQL BASICS & FILTERING

- SELECT, DISTINCT, WHERE, ORDER BY, LIMIT/TOP
- AND, OR, IN, BETWEEN, LIKE
- CASE, HAVING, NULL handling

AGGREGATION & JOINS

- COUNT, SUM, AVG, MIN, MAX
- GROUP BY and HAVING
- INNER, LEFT, RIGHT, FULL OUTER, CROSS and SELF JOIN
- Handling duplicate rows and join keys

SUBQUERIES, CTEs & WINDOW FUNCTIONS

- Scalar, nested and correlated subqueries
- EXISTS and NOT EXISTS
- WITH clause, multiple CTEs, readable query structure
- ROW_NUMBER, RANK, DENSE_RANK, LAG, LEAD
- Running totals and partitioning

DATA PREPARATION & BUSINESS ANALYTICS

- Data extraction, date differences, formatting, string manipulation
- Data transformation
- Revenue, profit, conversion rates, monthly growth, retention, cohorts and ranking

AI-ENABLED FEATURES & GOVERNANCE

- Performance analysis
- Copilot-assisted report creation and narrative features where licensed, enabled and supported
- Publishing workspace roles, access controls, refresh ownership and responsible sharing

COURSE CONTENT:

POWER BI ECOSYSTEM

- Power BI Desktop, Service, workspaces
- Reports, dashboards and sharing concepts

DATA CONNECTIVITY

- Excel, CSV, SQL databases, folders and API connectivity concepts

POWER QUERY

- Import, transform, merge, append, unpivot
- Data types, parameters and refresh

DATA MODELLING

- Fact and dimension tables, star schema
- Relationships, cardinality and filter direction

DAX FUNDAMENTALS

- Measures, calculated columns, calculated tables
- Row context and filter context

IMPORTANT DAX FUNCTIONS

- CALCULATE, FILTER, SUMX, COUNTROWS, DIVIDE, ALL and RELATED

TIME INTELLIGENCE

- YTD, MTD, QTD
- Prior-period comparison and year-over-year growth
- Calendar table requirements

VISUALIZATION

- Cards, tables, matrix, charts, maps and KPI visuals
- Choosing the right visualizations where appropriate

DASHBOARD DESIGN

- Layout, hierarchy, slicers
- Drill-down, drill-through
- Tooltips, bookmarks and accessibility

BUSINESS METRICS

- Revenue, profit, growth, conversion
- Productivity, retention and operational performance

ADVANCED REPORTING

- Row-level security, scheduled refresh, gateway concepts and more

IMBALANCED DATA, FORECASTING & IMPLEMENTATION

- Class imbalance, threshold selection and evaluation pitfalls
- Trend, seasonality, moving averages and introductory time-series forecasting
- Feature importance, interpretation, assumptions and limitations
- A basic Scikit-learn workflow for training, evaluating and making predictions

COURSE CONTENT:

GenAI Fundamentals

- Large language models, tokens, context windows, hallucinations and limitations.

Prompt Engineering

- Clear instructions, context, constraints, examples, iterative prompting and structured output.

AI-Assisted Excel

- Formula drafting, data cleaning suggestions and formula validation.

AI-Assisted SQL

- Draft queries, explain joins, debug errors, suggest improvements and test edge cases.

AI-Assisted Python

- Pandas code generation, visualization, debugging, documentation and review.

AI-Assisted BI

- Dashboard planning, DAX assistance and narrative summaries where supported.

Natural-Language Analytics

- Translate business questions into analytical steps and draft queries; verify generated logic.

AI Data Analysis Workflow

- Inspect data, define the question, clean, analyze, visualize, validate and communicate.

Automated Reporting

- Draft recurring summaries, report explanations and insight narratives.

Document and Text Analysis

- Extract structured information from PDFs, survey responses, feedback and reviews.

LLM-Assisted Classification

- Categorize tickets, reviews, feedback and customer comments; check labels and bias.

Quality Assurance & Responsible AI

- Recalculate totals, compare to source data, test edge cases, verify business definitions.
- Privacy, confidentiality, bias, copyright, security, approved tools and human review.

COURSE CONTENT:

EXCEL FOUNDATIONS

- Workbook structure, worksheets, tables and data types
- Named ranges and data validation
- Data visualization and keyboard-driven productivity

ADVANCED FORMULAS

- IF, IFS, SUMIFS, COUNTIFS, AVERAGEIFS
- IFERROR, nested formulas and logical operations
- Common advanced functions and use cases

LOOKUP FUNCTIONS

- XLOOKUP and VLOOKUP
- INDEX-MATCH and XMATCH
- Lookup troubleshooting and best practices

TEXT AND DATE FUNCTIONS

- LEFT, RIGHT, MID, TEXT, TEXTSPLIT (where available)
- TRIM, CLEAN
- Date arithmetic and date formatting

DATA CLEANING

- Handling duplicates and missing values
- Inconsistent labels and number/date formats
- Error checks and validation techniques

PIVOTTABLES AND PIVOTCHARTS

- Grouping and aggregation
- Slicers and calculated fields
- Interactive summaries and visual reports

ADVANCED ANALYSIS

- Conditional formatting
- Goal Seek and what-if analysis
- Scenario analysis and variance analysis

POWER QUERY IN EXCEL

- Importing data from multiple sources
- Merging, appending and transforming data
- Unpivoting, pivoting and refreshing datasets

BUSINESS REPORTING

- MIS reports and monthly reports
- KPI trackers and dashboards
- Variance analysis and management summaries

AUTOMATION AWARENESS

- Macro recording
- VBA basics and useful office scripts
- Focus on repeatable reporting tasks

COURSE CONTENT:

ML FUNDAMENTALS

- AI vs ML vs Deep Learning
- Supervised and Unsupervised Learning

DATA PREPARATION

- Feature labels and encoding
- Scaling and normalization
- Handling missing values
- Outlier treatment and data leakage

TRAIN/TEST METHODOLOGY

- Training, validation and test sets
- Cross-validation techniques
- Overfitting vs underfitting
- Test set awareness and evaluation strategy

REGRESSION

- Linear and multiple regression
- Interpreting predictions
- Error measures (MAE, MSE, RMSE)

CLASSIFICATION

- Logistic regression
- Decision trees
- Random forests
- Hands-on implementation and use cases

CLUSTERING

- K-means clustering
- Customer segmentation concepts
- Choosing the right number of clusters
- Practical examples and use cases

MODEL EVALUATION

- MAE, RMSE
- Accuracy, precision, recall, F1 score
- Confusion matrix
- Model comparison and interpretation

JOIN OUR COMMUNITY:

JOIN YOUTUBE

JOIN INSTAGRAM

JOIN LINKEDIN

JOIN FACEBOOK

JOIN TELEGRAM