

# RPA UiPath

This comprehensive RPA UiPath course is designed to take participants from a beginner level to an expert level in RPA UiPath development.



**20 Weeks**



**23 Modules**



**10 Quizzes**



# Course Highlights



**100 Hrs.**  
of Applied Learning



**Designed for**  
Working Professionals & Freshers



**50+**  
Industry Projects & Case Studies



**100%**  
Placement Assistance



**LinkedIn**  
Profile Review



**1:1**  
Mock Interview



**100+**  
Live sessions



**24\*7**  
Support

# Who can apply for this course

- ✔ Professionals looking to enhance their process automation skills and advance in their careers.
- ✔ Those interested in specializing in RPA UiPath Automation.
- ✔ Individuals aspiring to enter the RPA Automation field.
- ✔ Anyone keen on switching careers and entering the RPA Automation field.



# Where will your career Take off?

- ✓ RPA UiPath Automation Engineer
- ✓ RPA Developer
- ✓ RPA Engineer
- ✓ RPA Technical Lead
- ✓ RPA Solutions Senior Developer
- ✓ RPA Consultant
- ✓ RPA Administrator
- ✓ RPA Business Analyst
- ✓ RPA Support Engineer



# Learning Outcome

- ✓ Understanding the basics of Robotic Process Automation (RPA) and how it can streamline business processes.
- ✓ Gaining a comprehensive understanding of the UiPath platform and its various components.
- ✓ Learning to design, develop, and deploy software robots using UiPath Studio.
- ✓ Acquiring proficiency in building automation solutions for different business scenarios.
- ✓ Learning to automate tasks such as data extraction, web scraping, data entry, and report generation.
- ✓ Understanding how to integrate UiPath robots with other applications and systems.
- ✓ Developing skills to troubleshoot and maintain UiPath automation projects.
- ✓ Familiarizing with best practices and industry standards in RPA implementation.
- ✓ Gaining practical experience through hands-on exercises and real-world projects.
- ✓ Preparing for UiPath certifications, which can enhance career prospects in the field of RPA.



# Course Modules

## Module – 1

### Introduction to Data,Database and SQL

- Introduction to Data
- Different formats of storing data
- Structured & Unstructured Data
- Understanding the foundation of SQL
- Overview of SQL Server
- Setting up SQL Server and SSMS on windows computer
- Select statement.
- Row Ordering – ORDER BY
- Filtering Data with TOP
- ORDER BY Challenges
- Solutions to the ORDER BY Challenges
- WHERE Clause – Three-valued Logic
- Replacing Nulls in Queries
- WHERE Clause – Comparison Operators
- WHERE Clause Challenges
- Solutions to the WHERE Clause Challenges
- Introduction to Collations and Pattern Matching
- Pattern Matching – Part 2
- Introduction to Character Data Types
- Pattern Matching Challenges
- Solutions to the Pattern Matching Challenges
- Introduction to Aggregate Functions
- GROUP BY and Aggregate Functions
- HAVING Clause
- Logical Query Processing Order
- GROUP BY Challenges
- Solutions to the GROUP BY Challenges
- AND operator
- OR operator
- Operator Precedence
- IN Operator
- Logical Operator Challenges
- Solutions to the Logical Operator Challenges



# Course Modules

## Module – 2

### Joins & Integrity Constraints

- Inner Join
- Outer Joins – LEFT OUTER JOIN and RIGHT OUTER JOIN
- FULL OUTER JOIN
- Integrity Constraints
- Many-to-many Relationships
- Join Challenges
- Solutions to the Join Challenges
- Composite Joins – Joining on multiple columns
- Joining more than two tables
- Predicate placement – ON clause vs WHERE clause
- Self-referencing Joins
- Cross Joins
- Advanced Join Challenges
- Solutions to the Advanced Join Challenges

## Module – 3

### SQL Operator

- UNION and UNION ALL
- INTERSECT
- EXCEPT
- Set Operator Precedence
- SET Operator Challenges
- Solutions to the Set Operator Challenges

## Module – 4

### Sub Queries

- Self-contained Subqueries
- Correlated Subqueries
- EXISTS
- Introduction to Window Functions
- Common Table Expressions
- Avoiding the NOT IN trap
- Subquery Challenges
- Solutions to the Subquery Challenges

# Course Modules

## Module – 5

### Scalar Functions

- Concatenation in SQL Server
- String Manipulation Functions
- Date and Time Functions
- Function Challenges
- Solutions to the Function Challenges
- CASE Expression
- CASE Expression Challenges
- Solutions to the CASE Expression Challenges

## Module – 6

### Data Types, DDL, DML Operations

- Overview of Data Types
- Integer Data Types
- DECIMAL Data Type
- FLOAT Data Type
- CREATE TABLE Statement
- INSERT Statement
- CREATE TABLE Challenges
- Solutions to the CREATE TABLE Challenges
- UNIQUEIDENTIFIER (GUID) Data Type
- UPDATE Statement
- DELETE Statement
- TRUNCATE TABLE statement
- DROP TABLE Statement
- Transactions



# Course Modules

## Module – 7

### Procedure, Constraints & Views

- Stored Procedures
- Stored Procedures Demo
- Stored Procedure Challenges
- Solutions to the Stored Procedure Challenges
- ALTER TABLE Statement and sp\_rename
- ALTER TABLE Challenges
- Solutions to the ALTER TABLE Challenges
- UNIQUE Constraints
- CHECK Constraints
- Introduction to Indexes
- Index Types and Indexing Guidelines
- Index Types Part 2 – Composite vs Included Columns
- Sargable Queries
- Indexing and Sargable Query Challenges
- Solutions to the Indexing and Sargable Query Challenges
- CREATE VIEW Statement

## Module – 8

### User Defined Functions and their uses

- User-defined functions
- Types of UDFs, such as scalar
- Inline table value
- Multi-statement table
- Stored procedures and when to deploy them
- What is rank function?
- Triggers, and when to execute triggers?

## Module – 9

### SQL Optimization and Performance

- Records grouping, advantages, searching, sorting, modifying data
- Clustered indexes creation
- Use of indexes to cover queries
- Common table expressions
- Index guidelines

# Course Modules

## Module – 10

### Sql Analytics

- Correlated Subquery
- Grouping Sets
- Rollup
- Cube
- Rank
- CTE
- Indexes
- Triggers
- Correlated Subquery
- Rollup
- Grouping Set and Cubes

## Module – 11

### Database Normalization and Entity Relationship Model

- Introduction to Data Normalization
- Functional Dependencies
- Functional Dependencies Exercise
- Candidate Keys and Super Keys
- First Normal Form
- Restructuring Multi-valued and Multi-type fields
- Second Normal Form
- Third Normal Form
- Boyce Codd Normal Form

# Course Modules

## Module – 12

### Introduction to UiPath

- What is RPA?
- What are the different tools available in RPA?
- Difference between Test Automation and Process Automation?
- ROI Analysis – Feasibility of the process
- What is UiPath?
- What are the advantages of UiPath?
- Installation of UiPath Tool
- Architecture of UiPath
- Different Components of UiPath and their importance.
- Difference between the Bot and Process?
- Difference between attended and unattended Bots?
- What are different Licenses available in UiPath?

## Module – 13

### Getting started with UiPath

- Overview of UiPath Studio
- Project Types and Templates in UiPath Studio
- Design Ribbon and Debug Ribbon Options
- Project Panel
- Activities Panel
- Output Panel
- Workflow, State Machine and Flowchart
- UiPath Assistant (Robot)

# Course Modules

## Module – 14

### Coding Basics

- Variable Declaration and Initiation
- Variable Data Types
- Argument Declaration and Initiation
- Scope of Variable and Argument
- Coding Standards or Naming Conventions
- Conditional Statements
- Control Statements
- String Manipulation
- Regular Expressions
- Collections
- Exception Handling and Debugging

## Module – 15

### UI Automation

- What is UI Automation?
- Recording Types in UiPath
- What is UiPath Extension & Installation?
- Launching applications using different web browsers
- What is UIElement and their types?
- What is Selector and their types?
- Wildcard characters and their usage?
- Data Scraping
- Input Methods
- Output Methods
- UI Automation Activities
- Sample Use cases

# Course Modules

## Module – 16

### Excel Automation

- Data Extraction from Excel & CSV
- Data Table Activities
- Excel Activities
- Hot Keys
- LINQ Queries
- Excel Macros using VBA

## Module – 17

### Email Automation

- Different Email Protocols
- Read Emails and save the attachments
- Methods to extract the content from Email Body
- Send Email with Multiple Attachments
- Send Email with Tabular Data in the Email Body
- Send Email with Images in the Email Body
- Filter Emails using LINQ Queries

## Module – 18

### PDF and OCR Automation

- Extraction of Data from PDF without OCR
- Extraction of Data from PDF with OCR Engines
- Brief introduction – Extraction of Data from PDF with Abbyy Tool
- Brief introduction – Document Understanding Framework and AI Center
- PDF Activities

## Module – 19

### Other Automation Types

- Brief Introduction:
- Citrix Automation
- SAP Automation
- Mainframe Automation
- API Automation

# Course Modules

## Module – 20

### UiPath Frameworks

- State and State Machine
- Different Types of Frameworks (RE-Framework, Attended Framework & Test Automation Framework)
- Re-Framework without using Queues
- Re-Framework using Queues
- Exception Handling

## Module – 21

### UiPath Orchestrator

- Overview of Orchestrator
- Creating the Machines
- Creating the Robots
- Creating the Environments
- Connection establishment between UiPath Assistant and UiPath Orchestrator
- Publishing the Project and generating the Packages
- Creating the Process
- Adding the Assets
- Scheduling the Processes and assigning the Robots for execution
- Cron Expressions
- Robot Status Types
- Job Status Types
- Queue Status Types
- High Density Robots



# Course Modules

## Module – 22

### Project Explanation

- Use Case1
- Use Case2
- Use Case3

## Module – 23

### Job Assistance

- Resume Building
- Mock Interviews

# Top Skills and Tools covered

- ✔ SQL
- ✔ C#.Net Basics
- ✔ Regular Expressions
- ✔ LINQ Queries
- ✔ RPA UiPath Studio
- ✔ RPA UiPath Assistant
- ✔ Web Automation
- ✔ Desktop Automation

- ✔ Image Automation
- ✔ Mainframe Automation
- ✔ SAP Automation
- ✔ Citrix Automation
- ✔ Excel Automation
- ✔ Excel Macros Automation
- ✔ Word Automation
- ✔ PDF Automation

- ✔ Abbyy Tool Basics
- ✔ Database Automation
- ✔ API Automation
- ✔ RE Framework
- ✔ Attended Framework
- ✔ Test Automation Framework
- ✔ Document Understanding Basics
- ✔ RPA UiPath Orchestrator