



PYTHON TRAINING

Interactive Brokers Python Api Advanced

Master advanced Python API for Interactive Brokers to build sophisticated algorithmic trading strategies. Automate your financial market operations.

DURATION

2 hours

LEVEL

Intermediate

FORMAT

Instructor-Led

-
- Globally Recognized Certification
 - Expert-Led Hands-On Training
 - Flexible Scheduling

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COURSE OVERVIEW

Unlock the full potential of algorithmic trading with our 'Interactive Brokers Python Api Advanced' course. This intensive program is designed for intermediate Python developers and traders looking to elevate their automated trading strategies using the robust Interactive Brokers (IBKR) API. You will delve deep into sophisticated functionalities, moving beyond basic order execution to master real-time market data analysis, complex order types, and comprehensive portfolio management directly through Python. This course will equip you with the skills to build highly resilient and efficient trading systems capable of navigating diverse market conditions.

Duration	2 hours
Level	Intermediate
Vendor	Python

COURSE CURRICULUM

01 Module 1: Advanced Market Data & Real-time Analytics

- Streaming tick-by-tick data and Level 2 market depth
- Historical data requests with specific parameters (bar sizes, whatToShow)
- Handling market data subscriptions and rate limits
- Calculating custom indicators from streaming data

02 Module 2: Sophisticated Order Types & Execution Strategies

- Implementing algorithmic order types (VWAP, TWAP, PEG)
- Creating combination orders (spreads, butterflies) and conditional orders
- Understanding complex order attributes and order management lifecycle (modification, cancellation, status tracking)

03 Module 3: Portfolio Management & Account Information

- Retrieving real-time portfolio positions and account balances
- Accessing P&L statements and subscribing to real-time account updates
- Managing multiple accounts via the API
- Leveraging IBKR's risk parameters through the API

04 Module 4: API Robustness, Error Handling & Logging

- Strategies for handling API disconnections and reconnections
- Implementing effective error callbacks and exception handling
- Rate limiting and API request management best practices
- Asynchronous programming patterns for non-blocking API calls
- Logging API interactions and application state for debugging

05 Module 5: Building & Deploying Advanced Trading Algorithms

- Integrating advanced order types into a full trading strategy
- Event-driven architecture for real-time execution
- Considerations for live deployment (paper trading vs. live, security)
- Monitoring and maintaining automated strategies

CAREER PATHWAYS

Graduates of this program are prepared for the following roles:

- > **Algorithmic Trading Developer (Interactive Brokers Specialist)**
- > **Quantitative Analyst (Automated Trading Systems)**
- > **Portfolio Manager (Automated Execution Strategies)**

FREQUENTLY ASKED QUESTIONS

Q: What specific types of complex orders will I learn to implement using the IBKR Python API?

This course will cover the implementation of advanced order types such as VWAP, TWAP, PEG, combination orders (e.g., spreads, butterflies), and conditional orders. You'll also learn how to manage their lifecycle, from submission to modification and cancellation, ensuring robust execution through the Interactive Brokers Python API.

Q: What prior knowledge of Python and trading is expected for this advanced course?

This is an intermediate-level course. Participants should have a solid foundation in Python programming, including object-oriented concepts and basic asynchronous programming. Prior experience with the fundamental functionalities of the Interactive Brokers Python API (connecting, requesting basic market data, submitting simple orders) is highly recommended. A basic understanding of financial markets and trading terminology will also be beneficial.

Q: How will mastering the advanced IBKR API functionalities benefit my career in quantitative trading or financial automation?

By mastering the advanced functionalities of the IBKR Python API, you will significantly enhance your capabilities in algorithmic trading and financial automation. This skill set is critical for roles requiring the development of sophisticated trading strategies, efficient portfolio management systems, and robust real-time market data analysis platforms, giving you a competitive edge in quantitative analysis and automated trading development positions.

ABOUT COMPUTER PRIDE



East Africa's Premier IT Training Center

With over 15 years of excellence, Computer Pride delivers globally recognized certification programs from leading technology vendors. Located on Kenyatta Avenue in Nairobi's CBD, our state-of-the-art facilities and expert instructors have empowered thousands of professionals across East Africa.

15+

Years of Excellence

10,000+

Professionals Trained

50+

Vendor Certifications

READY TO ENROL?

Take the next step in your technology career.

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