

AUTOMATION COURSE

While students in large colleges study mass amounts of theory, we offer up to date, fresh and relevant QA and Testing Automation classes **focused on practical work methods**, **adapted to industry needs** so you can penetrate the job market with enough confidence and the right experience to do your job right.

Our classes are taught by industry experts, those who work simultaneously as interviewers and recruiters in high-tech companies and know exactly what it takes to succeed. Each student learns **only** what they need to know for their future jobs – for this reason, all candidates are screened and evaluated before admission in order to guarantee the highest level of learning and ensure future career opportunities.

What does this mean for you? You gain the best hands-on experience and pay less money - two birds, one stone.

Our knowledge, your future



Individuals

Our QA and Automation courses focus on practical knowledge; in class exercises, homework assignments and learning in small groups which allows for personal attention and better understanding of the material.



Companies

We offer customized QA and Automation courses and workshops according to your company needs. Course materials are suited to your everyday tasks and training requirements.



"Find Work"

Our goal is helping you achieve a total career upgrade and land that dream job. That's why we built a Professional Branding Intensive Course that gives our students a competitive edge over other candidates.





Who is this course for?

This course will teach you the most practical things required for getting an automation testing job. you will learn the most advanced automation concepts, how to design automation framework and how to solve the various complex issues that you may come across during your career.

This course is perfectly suitable for those who are:

- Software testers wanting to add automation testing to their toolbox.
- Software testers wishing to get an automation testing job.
- Automation testers seeking to upgrade their skills.
- QA engineers.
- Test Leads/Managers.
- Those who wish to learn automation testing process and frameworks.





Python development foundation

Developing using Python requires a bottom-up understanding of the language, its core constructs, and the solid foundation of the entire Python platform and development stack. In this module, you will gain the foundational knowledge of the Python platform.



Object-oriented concepts

The foundation of any software is the architecture. In this module, you will be immersed in an essential approach to software engineering: Object Oriented Analysis & Design. Gain skills in object-oriented concepts to model software that enables effective communication and useful abstraction.



Design patterns

Moving beyond merely writing valid code, it is crucial to develop insight into WHY, WHEN, and HOW to utilize design strategies most effectively. In this module, you will learn how to build solutions using Python for design patterns. After this model you will have the skills to deal successfully with any Python for automation related job interview question.



Frontend automation - selenium

We will review HTML, CSS, and JavaScript to level-set knowledge of frontend Automation development technologies. With that foundation in place, you will move on to learn the essential frontend automation capabilities using Selenium Framework necessary to build dynamic Automation tests for any web site.



Backend automation

In this module, you will build Backend services to test exposed data sent to the Frontend applications. Additionally, you will learn how to build data services, connect services to data stores, and perform query, mutation, and subscription operations.

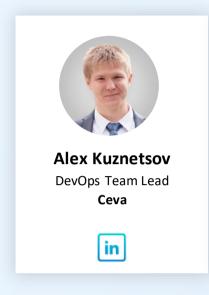


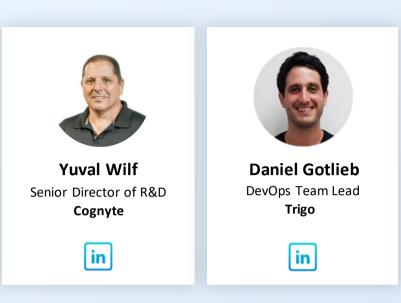
Continuous development

Continuous development is the process of executing automated tests as part of the software delivery pipeline to obtain feedback on the business risks associated with a software release candidate as rapidly as possible. software release candidate as rapidly as possible.



THE INSTRUCTORS





OUR ALUMNI WORK WITH THE BEST





COURSE CONTENT



Automation Professional Course



Independent Practice



Professional Branding Booster-Course



Job Search Support



High-Tech English Booster-Course



AUTOMATION DEVELOPMENT

Course description

Students will learn Python development, automating full stack (Front and Backend) and how to establish automation infrastructure. This course, which was designed by working professionals, will begin from the basics of automation testing using Selenium and continue to the most advanced automation testing topics. Students will be taught Python development, as well as advanced techniques that will ease their automation testing learning process.

TOPIC	DESCRIPTION
	PYTHON CORE
Overview and setup	 Introduction Case studies Market share Python Interpreters Compiling Vs. Interpreting Installation IDE setup PyEnv Venv
Python basics	 Data types Variables Statically Vs. dynamically typed Local Vs. global variables Casting & parsing String Literals



	 String format Constants Syntax Operators Statements Conditions Loops Data input Comments Reserved words
ООР	 Classes Objects Methods and functions Function parameters Function arguments Function overload Function overriding Constructors Packages Inheritance Programming conventions Garbage collection Regular expressions
Data structures	 Array List Tuple Dictionary Mutable vs immutable
Files (I/O)	 Files and paths Reading Writing Modes Test and binaries File manipulations Directories Paths Buffers Streams
Error handling	 Errors Vs. Exceptions Try Except Finally Raise exceptions
Libraries and tools	DebugLibraries



	1.60		
	Wheel filesPip and PyPi		
	Requirements filePoetry		
Unit toot	What is a testing framework?		
Unit test	PyTest		
	DecoratorsAssertions		
	Run order		
	Soft & hard failsTest run and suites		
Design patterns	What are Design patterns?		
Design patterns	 Anti-design patterns 		
	Programming conventionsCoupling and de-coupling		
	 Page object 		
	ConventionsRefactoring		
Common or analysis	What is Git?		
Source control	 Understanding Git 		
management	Terminology Setup 8 performations		
	Setup & configurationConfiguring Git		
	 Repository overview 		
	Building your repositoryBranching and Merging		
	• Commits		
	Resolving conflictsPull Requests		
	Remote repository		
Python project	Creating a Python program		
	FRONTEND AUTOMATION		
Selenium intro	• Overview		
	Selenium modulesSelenium components		
HTML, CSS,	IntroductionElements		
JavaScript	• Attributes		
	CSSJavaScript		
	• Ajax		
	Angular JS		
Selenium WebDriver	WebDriver Architecture		



	 Drivers WebDriver object methods Driver options Asserts and verifications Switch and navigation Working with iFrames Synchronization Reporting system Page object model (POM) Actions Selenium keys Alerts Browser actions Authorization
WebDriver elements	 Web elements overview Locating Web elements Web elements interaction Locators overview Locators types Choosing the right locators Relative locators Controllers Web elements data File uploads Elements screenshot
Headless Testing	 Headless testing usage Advantages and disadvantages Show cases Headless types Headless test execution
Final web project	Selenium WebDriver project - "Automating Web Project"
	BACKEND AUTOMATION
REST API overview	 HTTP intro Layers What is API? What is REST? Why REST? REST vs. SOAP API overview Rest methods Status codes
JSON	OverviewStructureJSON rulesJSON parsing



REST hands-on	 Requests REST client REST CRUD operations REST methods Creating REST requests Response processing Working with a real API Running automatic API tests Selenium & API testing integration API as Data Driven tests
Backend server	 Flask introduction Routes Path params Query params Binding Debug mode
Relational Database	 Overview PyMySQL SQLalchemy Setup and configuration MySQL drivers Running queries from our code Creating and working with a remote database Connections Statements and prepared statements Security DB operations
DB CRUD operations	 Select Update Insert Delete Indexing Query profiling Automating DB tests
Final backend project	Building and automating backend server
CONTINUOUS DEVELOPMENT	
CI Intro	OverviewWhy continuous integration is used for?Jenkins introductionJenkins Architecture
Jenkins core	Setup & configurationJenkins configurationsPluginsPipelines



	Alerts and notificationsAuthenticationAuthorizationCreating users
Build jobs	 What are build Jobs Building your build jobs Build triggers Scheduling CRON expressions Reporting Disabling and deleting jobs Jenkins - Maven Integration Automating automations Nightly runs
Cloud testing	 Cloud introduction SauceLabs RemoteWebDriver Browser pools Parallel testing