

DevOps COURSE

While students in large colleges study mass amounts of theory, we offer up to date, fresh and relevant DevOps 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 **exactly** 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



Private classes

Our DevOps 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.



Classes for companies

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



“Preparation for Work” workshop

We can provide career assistance by reviewing your resume, teaching social media networking and defining LinkedIn content for professional “branding” as well as refer you to relevant positions.

COMPANY DETAILS

HEADQUARTERS

Ramat Gan, Tel Aviv District

YEAR FOUNDED

2015

COMPANY TYPE

Educational Institution

COMPANY SIZE

40-50 employees

Who is this course for?

DevOps engineer career opportunities are exploding worldwide. Organizations are investing heavily in DevOps capabilities to maintain a cutting edge in the market. DevOps course will be of benefit the following professional roles:

- IT engineers
- Software Developers
- Architects
- Technical Project Managers
- Operations Support
- Deployment engineers
- Dev managers
- Automation testers
- Decision makers



Learn from industry experts

Industry-recognized DevOps engineer course will teach you current and in-demand skills, ensuring you stay ahead of the curve in a fast-changing industry.



Get hands-on experience

Practical skills are key to succeed and stand out in the market. By working on practical tasks throughout the course, you'll master the skills of a great DevOps engineer.



Learn amongst professionals

With a network of likewise professionals, enjoy the unique perspective and professional experience of your classmates.



Connect with the industry

Expect dedicated career guidance, access our industry hiring partners, and find your future employment in DevOps.

THE INSTRUCTORS



Danny Gitelman

DevOps Architect
Amazon



Aviel Buskila

Head of DevOps
Identiq



Daniel Gotlieb

DevOps Tech Lead
Trigo



Doron Nuni

DevOps team leader
Cognyte



Modi Tamam

R&D - DevOps Leader
Mobileye



OUR ALUMNI WORK WITH THE BEST



DEVOPS COURSE SYLLABUS

Scripting for DevOps Engineers

Engineers automating infrastructure and managing configuration need to know how to code. In this module, you will get a hands-on introduction to the Python programming language as well as advanced techniques that will ease your Development learning process.

Build Automation and Continuous Integration

An effective DevOps leverages technology to power continuous integration and a continuous delivery pipeline. In this module, you will learn how to configure Jenkins to run pipelines, code coverage and quality tools, testing suites, and CM and deployment tools.

Version Control Using Git

In this module, you will learn why and how to use a version control system for DevOps. You will use Git to version, manage, merge, diff, and control your infrastructure code.

Data and Continuous monitoring

In this module, you discover how to collect, analyze, and make decisions using logs and other system-generated data. You ingest and analyze log and other system data to provide operational troubleshooting and decision support capabilities.

Linux Fundamentals

Once you've established a DevOps program, you will learn how to setup, configure, administer, and manage data center and Cloud-based environments. In this module, you will learn the Linux skills required to build these foundations.

Working with Containers

In a DevOps program, Docker containers can be used to simplify deployments. In this module, you will learn how to build containers and compose multi-container applications to support microservices.

Provisioning Resources

In this module you will learn how to provision resources across over 20 different on-premises and cloud platforms and how to create and provision resources in a hybrid infrastructure.

Configuration Management

Automating configuration management tasks helps gain speed, agility, and productivity. In this module, you will learn how to use technology to automate these tasks.

<i>Topic</i>	<i>Description</i>
Introduction to DevOps Concepts	
Introduction	<ul style="list-style-type: none"> • What is DevOps? • Methodologies • The role of ops in the DevOps world
Scripting for DevOps Engineers	
Overview and setup	<ul style="list-style-type: none"> • Intro • Python environment setup • IDE setup
Data and control flow	<ul style="list-style-type: none"> • Data types • Syntax • Operators • Statements • Conditions • Loops
Data structures	<ul style="list-style-type: none"> • Array • List • Tuple • Dictionary
Advance Python	<ul style="list-style-type: none"> • Files I/O • Error handling • Debug • Packages • PIP • Conventions
Web fundamentals	<ul style="list-style-type: none"> • Introduction • Elements • Attributes • CSS • JavaScript

Test automation	<ul style="list-style-type: none"> • Web drivers • Methods • Locators • Controllers • Switch and Navigation • Synchronization
API's	<ul style="list-style-type: none"> • Overview • Protocols • Why REST • Requests API • Rest methods • Response codes • Structure • JSON rules • JSON parsing • Routing • Path params • Query params • Building an API
Python project	<ul style="list-style-type: none"> • Build a python RESTful API
<i>Build Automation and Continuous Integration</i>	
CI Intro	<ul style="list-style-type: none"> • Overview • Jenkins Introduction • Exploring Jenkins dashboard • Jenkins Architecture
Jenkins core	<ul style="list-style-type: none"> • Setup & configuration • Jenkins configurations • Pipelines • Blue Ocean
Build jobs	<ul style="list-style-type: none"> • What are build Jobs • Building your build jobs • Scheduling • Reporting • Disabling and deleting jobs • Post build actions • Pipelines as code

Jenkins management	<ul style="list-style-type: none"> • Plugins • Log rotation • Master-slave architecture • Nodes restrictions • Reporting
Jenkins security	<ul style="list-style-type: none"> • Authentication • Authorization • Creating users • Jenkins API
<i>Version Control Using Git</i>	
Git Basics	<ul style="list-style-type: none"> • What is Git? • Git VS. SVN • Terminology • Setup & configuration • Configuring Git • Logging • Commits • Branching • Merging • Conflicts • Reset & Revert • Git GUI
Git & Repository	<ul style="list-style-type: none"> • Repository overview • Remotes • Cloning • Fetch, pull & push • Building your repository • Pull Requests • Git – Jenkins integration

<i>Data and Continuous monitoring</i>	
Database	<ul style="list-style-type: none"> • Overview and setup • RDBMS Vs. NoSQL • Types • Connections • Security • Schemas and tables • Columns properties • Data types • PyMySQL • Cursor • DB (CRUD) operations
Data monitoring	<ul style="list-style-type: none"> • Monitoring Concepts • Introduction to Prometheus stack • Prometheus server • Metrics collection • PromQL • Exporters • Grafana • Alert Manager
<i>Linux Fundamentals</i>	
Overview	<ul style="list-style-type: none"> • What is Linux? • Distributions • Environment setup • Oracle VirtualBox & VMware
Linux commands	<ul style="list-style-type: none"> • Shell, Bash & Terminal • Commands • Input / Output • Package management • Interprocess communication • Grep, tail, sed
Linux system	<ul style="list-style-type: none"> • System Utilities • Linux processes • System signals • VI & VIM & nano • SSH server & client • Public and private keys • SFTP

Working with Containers	
Overview	<ul style="list-style-type: none"> • What is, and why Docker? • Use case of Docker • Container Life Cycle • Docker vs. Virtualization • Docker types • Environment setup • Docker commands
Docker basic	<ul style="list-style-type: none"> • Docker architecture • YAML • Docker images • Docker compose • Services • Docker image download • Working multiple containers • Contexts • Docker HUB
Docker advanced	<ul style="list-style-type: none"> • VNC (Virtual Network Computing) • Docker-Jenkins integration • "Dockerizing" your code • Creating a custom image • Running a container from the custom image • Docker networking • Docker volumes • Best practices • Docker-Jenkins integration • Containers dependencies • Environment files and configurations
Container Orchestration - Kubernetes	<ul style="list-style-type: none"> • Intro to Kubernetes • Kubernetes Architecture • Environment Setup • Kubernetes Components Hierarchy • The K8S API
Working with Kubernetes	<ul style="list-style-type: none"> • Objects • API versions • Desire and actual state • Pods, ReplicaSets, Deployment • Updates and reverts • Scaling and auto scaling

	<ul style="list-style-type: none"> • Services, networking options, Exposing our cluster • Config maps • Secretes • Kubectl • Logging
HELM	<ul style="list-style-type: none"> • Intro to Helm • Architecture • Developing and managing helm charts • Templating • Parameterized deployments • Debugging • Updating charts • Requiring dependency as charts • Sharing chart with repositories
Hosted Kubernetes	<ul style="list-style-type: none"> • Container Services in the cloud (GCP, AWS) • K8S On premise
CI/CD Project	<ul style="list-style-type: none"> • Build and ship your containerized python application platform using CI/CD pipelines
<i>Provisioning Resources</i>	
Cloud platform	<ul style="list-style-type: none"> • Overview • Why cloud? • GCP Vs. AWS Vs. Azure • Cloud deployment
AWS (Amazon Web Services) basics	<ul style="list-style-type: none"> • AWS account • Regions • EC2 types and pricing • AMI's • EIP, allocating, associating, releasing • Launch instances in AWS • Identity Access Management (IAM) • Roles • Policies • Users • Groups

AWS hands-on	<ul style="list-style-type: none"> • AWS CLI • Cloud app deployment • Connecting to cloud remote machines • Working with access key and secret access keys • Profiles • Budgets • Cost explorer
Terraform	<ul style="list-style-type: none"> • Infrastructure as code • Environment setup • HCL • Workflows • Commands • Providers • Resources • Variables • User data • Output values • Cloud infrastructure
<i>Configuration Management</i>	
Configuration management	<ul style="list-style-type: none"> • Introduction • Terminology • Modules • Configurations management tools • Master-Agent configurations • Agentless operation • Roles • Environments

Ansible	<ul style="list-style-type: none"> • Introduction to Ansible • Ansible advantages • Ansible Installation • Provisioning • Built-in security • Configuring Ansible Roles • Write Playbooks • Executing Ad-Hoc command • Declarative commands • Facts • Modules • Variables • Ansible galaxy • Conditionals • Loops • Vault
<i>Final Project</i>	
Final project	<ul style="list-style-type: none"> • Orchestrating your containerized deployments for production-ready products
<i>Job Interviews</i>	
Job interviews	<ul style="list-style-type: none"> • Most frequent interview questions and solutions • Course summary