Codecool trainings

Become a subject matter expert with us

Get to know our shorter, specialized trainings and their curricula.

These immersive online trainings will teach you the latest tools and techniques in only a few days. Specialize in a specific area and stay up to date. We can help you enhance your skillset and quickly take a step forward in your career.

CODECOOL BUSINESS

1. Kubernetes

Improve your DevOps skills

Length
5 days

Requirements
Basic Linux knowledge or familiarity with Linux CLI.

Looking to boost your DevOps skills and streamline your application development process? By the end of the course, you'll have the knowledge and skills to make app development and operations faster, simpler, and more sustainable.

Perfect for:
Software developers, application architects, DevOps engineers, and system administrators who want to learn about container virtualization and the modern DevOps world.

During the course, we will cover:

- An all-encompassing introduction to Kubernetes
- Installation
- Accessing the Kubernetes API
- Kubernetes workloads
- Configuring and managing scheduling and node management
- Configuring and managing networking, services, and ingress
- Configuring and managing storage
- Configuration as Data
- Kubernetes special workloads
- Logging, base metrics monitoring
- Alternate visualization of Kubernetes

*You will be invoiced in the currency of your loca-

- The course will be held online, in English.

2. Docker

Transform your DevOps workflow

Length
3 days

Requirements
Basic Linux knowledge or familiarity with Linux CLI.

Get ready to explore container virtualization and the modern DevOps world. Discover how to make application development and operations faster, simpler, and more sustainable. By the end of the course, you'll have the knowledge and skills to make app development and operations faster, simpler, and more sustainable.

Perfect for:
Software developers, application architects, DevOps engineers, and system administrators who want to learn about container virtualization and the modern DevOps world.

During the course, we will cover:

- An all-encompassing introduction to containers
- Installation
- Handling and interaction with containers
- Docker networking
- Dockerfiles
- Building images
- Advanced technologies for Dockerfiles
- Docker registry
- Docker storage/volumes
- Managing containers
- Using docker-compose
- Integrating with Visual Code
- Change Docker to containers

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3. Ansible

Learn automation without coding

Length
2 days

Requirements
No prior knowledge is required

Ready to master automation without coding? Join our Ansible training, recommended to anyone looking to learn with the real-time support of a mentor.

Perfect for:
System administrators, cloud infrastructure, and automation engineers who want to learn about automation without coding using Ansible.

During the course, we will cover:

- A comprehensive introduction to Ansible and basic commands
- The Ansible architecture
- Installation
- Components
- Inventories
- Configuration and ad hoc management
- Playbooks
- Roles
- Vault
- System management

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4. IT Security for managers

Keep your projects safe

Length
2 days

Requirements
No prior knowledge is required

Our training is the perfect way to master the fundamentals of IT security and gain a clear understanding of the severe consequences that even the slightest coding error or security vulnerability can have.

Perfect for:
Perfect and highly recommended for managers, IT managers, project managers, and product owners who don't code but are responsible for coding projects or managing coders.

During the course, we will cover:

1. Understanding basic principles
   - Vulnerability
   - Shellcode
   - Exploit
2. Recording and classifying vulnerabilities, their use, and other initiatives
   - CVE
   - CWE
   - CVSS
   - NIST NVD
   - OWASP
3. Social engineering
   - What is social engineering, and why is it dangerous?
   - Methods of social engineers, what tools they use, what human behavior and traits they exploit, and how?
   - How can we defend ourselves against it?
4. IT Security concepts
   - Boundary control (input validations)
   - Two-dimensional thinking
   - Side effects
   - Handling unknown values
   - Framing communication

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5. Frontend web security

Fortify your frontend

Length
3 days

Requirements
A basic understanding of front-end development and knowledge of JavaScript and HTML

Gain the skills to detect, manage, and prevent security risks in your software with our comprehensive training program. We will teach you how to implement best practices and tackle specific software security issues head-on, ensuring your software is fully protected against malicious attacks.

Perfect for:
Front-end developers who want to strengthen their defenses against cyber threats.

During the course, we will cover:

1. Introduction and general basic concepts
   - Vulnerability
   - Shellcode
   - Exploit
2. Keeping track of vulnerabilities, classification, their use, and other initiatives
   - CVE
   - CWE
   - CVSS
   - NIST NVD
   - OWASP
3. Web security basics and concepts
   - The HTTP protocol
   - Cryptography basics
   - Hashing
   - Symmetric and asymmetric encryption
   - Digital signatures
     - The HTTPS protocol
     - How SSL and TLS work
     - Properties of cookies, local storage, etc.
     - Browser defense tools
     - How web servers work
   - CGI
   - FastCGI, etc.
4. Information gathering and mapping
   - Extracting information from HTML and JS sources
   - Extracting information from error messages
   - Extracting information from HTTP headers
   - Detecting browser cache files (locally)
   - URL scanning and testing, exploiting file download vulnerabilities
   - Mapping API endpoints
5. Attack modes and defense methods against them
   - Attack modes against forms, spamming, littering, etc.
   - Unvalidated redirects
   - Cross-Site Scripting (XSS) and HTML injection
   - Cross-Site Request Forgery (CSRF)
   - Password theft techniques
   - password storage, hashing, salting
   - Session theft and cookie theft
   - SQL and NoSQL injection
   - File upload attacks
   - Exploiting browser vulnerabilities
6. Social engineering
   - What is social engineering, and why is it dangerous?
   - Methods used by social engineers, what tools they use, what human behavior and traits they exploit, and how?
   - How to defend against it

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6. Secure web

Protect web development projects against cyber threats

Length
5 days

Requirements
A basic understanding of Java. (Course can be conducted in other programming languages upon request via email)

Enhance your skills and comprehensively understand safeguarding your web development projects. You'll learn how to use developer tools to detect and prevent issues and defend against malicious attacks.

Perfect for:
Web developers who want to gain a deep understanding of how development can be used to achieve security.

During the course, we will cover:

1. Clarification of basic concepts**of basic concepts**
   - What is security, and who is OWASP?
   - Why is developing the best way to achieve security?
   - Threat modeling: the purpose of threat modeling, components of threat models, and practical threat modeling.
2. Prevention of most common problems (through practical coding exercises):
   - Developer tools for preventing the following security issues
   - Logging and monitoring problems, use of components with known vulnerabilities,
   - Serialization and deserialization issues, not just web scripting problems (XSS),
   - Incorrect security configurations, poor access control,
   - XML processing issues (XXE), sensitive data disclosure,
   - faulty authentication and session management, injection attacks.
3. Common problems beyond the OWASP Top 10 (through practical coding exercises):
   - Problems arising from incorrect API usage (SecureRandom), incomplete knowledge of standards (number representation, floating point), exploitation of character encoding
   - Manipulation of server-side requests (SSRF), race conditions in applications
   - (race conditions), buffer overflow attacks
   - Cryptography basics: encryption, decryption, hashing
4. Mindset for preparing for unknown attacks
   - Why is the OWASP Top 10 not enough?
   - Structure of attacks, how a hacker thinks
   - Developer tools for preventing the following security issues, interesting topics (based on time and audience preference):
   - Problems with referenced pages (reverse tabnabbing);
   - Manipulation of server-side requests (SSRF);
   - HTTP packet smuggling (HTTP request smuggling);
   - Race conditions in applications (race conditions);
   - Unvalidated redirects;
   - Poor use of cryptographic algorithms;
   - DoS (+ReDoS)
   - ClickJacking;
   - cache poisoning;
   - buffer overflow attacks.

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7. Data analyst

Make informed business decisions

Length
5 days

Requirements
Strong analytical thinking skills.

Join our Data Analyst training to uncover hidden gems in massive datasets and make informed business decisions like a pro. This course covers the basics of data analysis and teaches you the skills you need to streamline your reporting process.

Perfect for:
Professionals who work with large amounts of data in their daily work, including those in financial and accounting sectors, marketing, research and development, manufacturing, and other fields.

During the course, we will cover:

- Regular tools and the GIT control system
- Python for Data Science
- Statistics and Probability
- Processing data sets
- Data visualization
- Practical Machine Learning
- TensorFlow library for Machine Learning
- Neural networks
- Image processing and computer vision
- Natural language processing
- Working with sequences - recursive neural networks

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Reach out if you have any questions, we’re here to discuss whatever’s on your mind.

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Where we are