

# Codecool portfolio

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### **About Codecool**

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Codecool is a next-generation programming school and your ultimate **corporate IT training and recruitment** partner. We're building a global experience that reskills, reshapes, and relaunches Europe's modern-day workforce, one digital skill at a time.

Our trainers—professional mentors with extensive experience as senior **IT experts and managers**—ensure the highest quality of education.

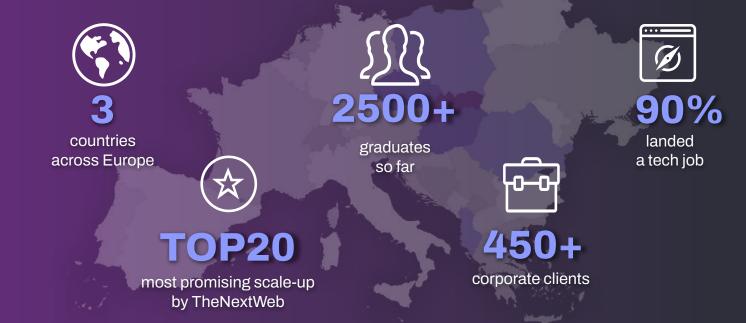
We believe in the power of teamwork and **project-based learning** that simulates a real work environment.





# **Codecool in numbers**

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# Our large-scale digital skills projects

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Innovációs és Technológiai Minisztérium



Motorola Solutions



Európai Szoftverkészség-fejlesztési Szövetség In the frame of a Ministry of Innovation and Technology's programme **Codecool trained 400 unemployed Hungarians free of charge** to become front-end developers, back-end developers, software testers or system administrators in 17 weeks, and so get a new chance of employment in the job market and start their lives anew in future-proof tech careers.

Codecool has partnered with Motorola Solutions in Poland and built the **Motorola Solutions Academy**. Codecool created a comprehensive sourcing and training programme, **recruited and selected 80 participants from 300 candidates, and is delivering their 7-month training**, and will support their onboarding, so that they become Motorola Solutions new frontend and backend developer workforce. We delivered 4 of these academies so far for Motorola based on their special needs.

As a member of the European Software Skills Alliance Codecool is going to develop and implement a Software Skills Strategy and corresponding Vocational Education and Training (VET) programmes for Europe together with 25 industry and education stakeholders, like Adecco or Amazon Web Services



### Our recurring corporate clients

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# Why Codecool?

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We have a long history of training IT specialists. With the right motivation and logical skills, we can train anyone with no IT experience to become a great developer. We guarantee that our new recruits are not only trained to acquire technological knowledge but also to become employees who are constantly looking for innovations and keeping up with the latest trends.

#### Flexibility



Our training courses are **fully customizable** based on individual needs.



#### **Practice-oriented education**

You don't need textbooks or academic knowledge to learn a new technology. That's why we have developed the Codecool training and coaching methodology based on practice. It gives your colleagues a **strong foundation** and practical experience they can start working with immediately.



## **Corporate training courses**

Send your colleagues to one of our **proven tech training courses**. They'll quickly develop critical skills thanks to our established method and course structures.

In addition to technology, our training courses also focus on developing **soft skills**. Our 3-10 day training courses can be **tailored to your specific needs**.



#### When could you benefit from a corporate training?



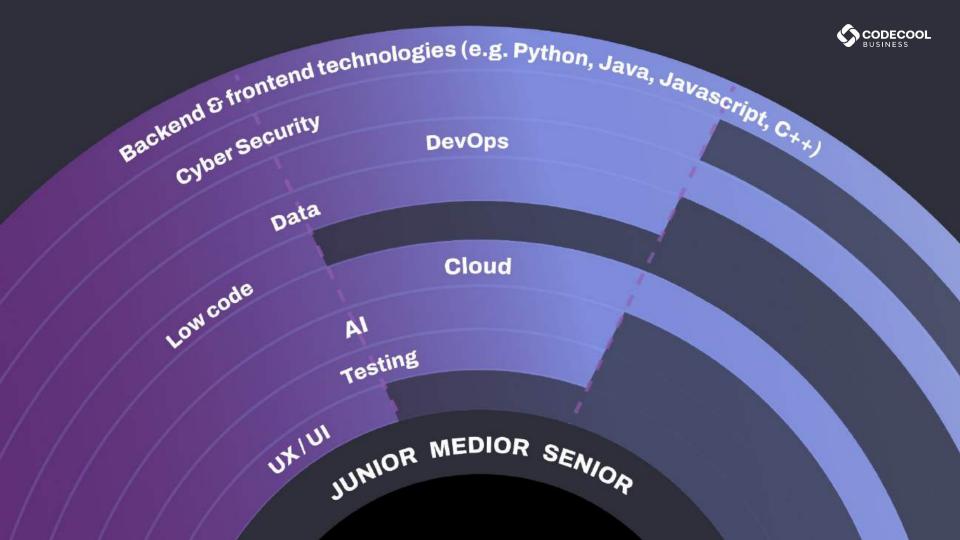
There are enough IT colleagues in the team, but **there is a need for additional tech skills** to implement a digital strategy.



You want to **motivate and retain your tech colleagues** with options for development and growth.



You want to **save time and money** to avoid costly redundancies, recruitment, and onboarding.







# **Available courses**

In addition to the training courses in our portfolio, feel free to get in touch for a tailor-made training plan to suit your business needs.



#### **TRAINING COURSES**

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Advanced Python	5 days
Advanced SQL	4 days
Advanced UI Skills	2 days
Advanced UI Skills	2 days
Advanced Usability Testing	1 day
Advanced Usability Testing	1 day
Advanced UX Design	2 days
Advanced UX Design	2 days
Agile - Scrum 2	2 days
AI for Everyone	
AI for Programmers	
Angular	5 days
Ansible	3 days
Apache	1 day
Azure	3 days
Bash Scripting	3 days
C# from Scratch	21 days
CI/CD	3 days
Cloud Fundamentals	3 days

Cloud Security	3 days
Containerization	2 days
Cybersecurity (with Python basics)	6 month
Data Analyst	5 days
Design Patterns and Best Practices	1 day
DevOps Fundamentals	5 days
Docker	5 days
Frontend Web Security	3 days
Git	2 days
Golang	5 days
Infrastructure as Code (Terraform)	3 days
IT Basics	5 days
IT Security for Managers	2 days
Java	10 days
JavaScript	10 days
JavaScript Basics	5 days
Jenkins	2 days
Kubernetes	5 days
Linux	5 days

Microservices	2 days
OpenShift	
Podman	
PowerShell	3 days
Python	5 days
React	5 days
REST	3 days
REST Web Services 1	1 day
Salesforce Admin & App Builder	5 days
Secure Web Training	1 days
Software Architecture	4 days
Spring Core	3 days
Terraform	5 days
Testing	1 day
UI Fundamentals	3 days
Unified Modeling Language (UML)	1 day
UX Design Essentials	2 days
Virtualization	



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# **Training course examples**

See some examples of the content and structure of our training courses in our portfolio.





# **1. Kubernetes**

### Improve your DevOps skills



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.

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Length: 5 days

Requirements: Basic Linux knowledge or familiarity with Linux CLI is required.

#### 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



# 2. Docker

# Transform your DevOps workflow



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.



Length: 3 days

Requirements: Basic Linux knowledge or familiarity with Linux CLI is required

#### 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



# 3. Ansible

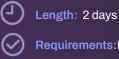
### Learn automation without coding



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.



**Requirements:**None

#### 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 .





# 4. IT security for managers

### Keep your projects safe



#### 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.



#### Length: 2 days

Requirements: No prior knowledge is required.

3.

4.

#### During the course, we will cover:

Understanding basic

principles

- a., Vulnerability
- b., Shellcode
- c., Exploit
- Recording and classifying vulnerabilities, their use, and other initiatives a., CVE b.. CWE c.. CVSS d., NIST NVD
  - e.. OWASP

Social engineering a., What is social engineering, and why is it dangerous? b., Methods of social engineers, what tools they use, what human behavior and traits they exploit, and how? c., How can we defend ourselves against it?

IT Security concepts a., Boundary control (input validations) b., Two-dimensional thinking c., Side effects d., Handling unknown values e., Framing communication



# 5. Frontend web security

### Fortify your frontend

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#### 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.

The course will be held online, in English.

#### Length: 3 days

Requirements: A basic understanding of front-end development and knowledge of JavaScript and HTML to successfully complete the course.

#### 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
  - A HTTPS protocol
- How SSL and TLS work

- Properties of cookies, local storage, etc.
- How web servers work
- Browser defense tools
- 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



# 6. Secure web

### Protect web development projects against cyber threats

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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.

The course will be held online, in English.

Length: 5 days

Requirements: A basic understanding of Java is required, but the course can be conducted in other programming languages upon request via email.

## During the course, we will cover:

#### 1.Clarification of basic concepts

a., What is security, and who is OWASP?
b., Why is developing the best way to achieve security?
c., 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):

a., 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),

b., Incorrect security configurations, poor access control,
c., XML processing issues (XXE), sensitive data disclosure,
d., faulty authentication and session management, injection attacks.

### 3.Common problems beyond the OWASP Top 10 (through practical coding exercises):

a.,Problems arising from incorrect API usage (SecureRandom), incomplete knowledge of standards (number representation, floating point), exploitation of character encoding b., Manipulation of server-side requests (SSRF), race conditions in applications

- c., (race conditions), buffer overflow attacks
- d., Cryptography basics: encryption, decryption, hashing

#### 4. Mindset for preparing for unknown attacks

- a., Why is the OWASP Top 10 not enough?
- b.,Structure of attacks, how a hacker thinks

c., 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.



# 7. Data analyst

# Make informed business decisions



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.

The course will be held online, in English.

Length: 5 days

**Requirements:** No prior IT knowledge is necessary, but strong analytical thinking skills are required.

#### 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



# 8. Salesforce Admin& App Builder

# Make the most out of Salesforce with custom no-code solutions



This course dives deep into Salesforce's data modeling, security, and process automation while preparing you for essential certifications. Learn how to enhance your Salesforce with no-code solutions and practice your skills through custom projects.

#### Perfect for:

Anyone who wants to integrate Salesforce more effectively into their business practices or wants to specialize in Salesforce including professionals in sales, marketing, customer service or IT. The course prepares participants for the Salesforce Administrator and Platform App Builder certifications



Length: 4 months (part time schedule)

Requirements: English knowledge

#### During the course, we will cover:

Salesforce CRM basics:

- Data modeling and management
- Security management: user permissions and basic data security settings
- Business logic and process automation

Advanced Salesforce data management:

- Flow-based business process configuration without coding
- Automated data operations and email notifications using flow
- Salesforce user interface customization: object and page layout settings

Reporting and mobile capabilities:

- Creating detailed reports and dashboards
- Using Salesforce mobile app and its features
- Development processes: testing in sandboxes before deployment

Salesforce configuration and integration:

- Setup and configuration of Salesforce systems
- Understanding different Salesforce clouds: sales, marketing, and service clouds
- Integration with external services and their benefits

Certification preparation:

 Practical projects designed to deepen understanding and assess acquired knowledge



# 9. Al for everyone

# Get up to speed with artificial intelligence



Artificial intelligence can speed up workflows and simplify day-to-day tasks if used effectively. This course helps participants use the most important AI tools and learn to work with AI concisely.

#### Perfect for:

This course is ideal for anyone looking to stay competitive and advance in the workforce through Al knowledge. It's perfect for content creators, educators, commerce professionals, and those seeking to enhance their skills in various fields. Led by experts, the course provides effective strategies to streamline workflows and integrate AI efficiently into daily tasks.



Length: 4 weeks

Requirements: English knowledge

During the course, we will cover:

- History and fundamentals of artificial intelligence
- Techniques for interacting with text-based AI models
- Advanced prompt engineering for text and image models
- Utilizing AI for content generation, video production, and SEO optimization
- Automation tools for enhancing workflow efficiency, including AI and non-AI-based solutions



# **10.Al for** programmers

### Get up to speed with artificial intelligence



Keeping up with AI is not easy-new tools and enhancements emerge almost daily. But when applied correctly, AI can fundamentally transform how we work in programming.

#### Perfect for:

This mini-course is recommended for beginner programmers who want to learn more about and effectively use free AI tools such as ChatGPT, GitHub Copilot, or CodiumAI. By the end of the course, participants will be proficient in writing prompts and using AI-based solutions in their work and programming studies.

Length: 2x4 hours with a mentor + a total of 30-40 hours of independent work on materials and projects

- **Requirements:** English knowledge

#### During the course, we will cover:

- Fundamentals of AI: definitions and key concepts
- Introduction to AI assistants: focus on ChatGPT and similar • technologies
- Deep dive into the working mechanisms of AI assistants
- Prompt engineering: techniques for writing effective prompts for AI tools
- Enhancing programming skills with ChatGPT: strategies for learning and coding more efficiently
- Using AI to boost developer productivity: practical applications and • case studies
- Introduction to CodiumAI: overview and use cases
- GitHub Copilot: learning to integrate and use this tool in development workflows

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

corporate.training@codecool.com



