coyotiv

Course Details:

Full-Stack Software Engineering in Web Development - online

- 14 weeks long
- full-time and immersive
- fully in English

100%
FREE WITH
BILDUNGSGUTSCHEIN



Focus of the Full-Stack Software Engineering course

Organization/Structure

- Duration:14 weeks of intensive learning

  Check with the Coyotiv team for the upcoming start dates; note: no classes on public holidays in Berlin/Germany, these days will be made up for

- Language: English

  English is the global language of web development. We teach in English to give you the best possible foundation and future opportunities.

- Format: Full-time and immersive

  To truly learn software engineering, you must live it. Our fast-paced curriculum requires your full attention and commitment.

- Delivery: 100% online and fully remote

  Live lectures, group sessions, and 1:1 pair programming create a rich, hands-on learning experience—wherever you're set up to focus best.

- Structure: 3 Modules

  The course is divided into three modules. Each module can be taken individually. Entry into Modules 2 and 3 requires passing assessment tests. Details follow on the next pages

- Instructors: Learn from industry professionals

  Our teachers are experienced developers who teach through real-world practice. Small group sizes ensure you get personal feedback and guidance, not lost in a crowd.

- Pricing

  Module 1: 2,720 Euros; Module 2: 4,445.40 Euros; Module 3: 2,838 Euros; Total: 10,003.40 Euros

Topic Overview

- Modern Software Development

  Lectures on Object Oriented Programming, UML diagrams, Functional programming, event driven architecture, design patterns and more

- Frontend Development

  Learn the ins and outs of modern component-based frontend development with Vue.js. SPAs, server-side rendering, maintainable HTML5 and CSS3 fundamentals

- Backend Development

  Lectures on Node.js and REST APIs, layered architecture, Node.js modules and packages, authentication and external API processing

- Databases

  Lectures on database design, ORMs, and advanced aggregation concepts while developing a real-life application using MongoDB and it's packages and tools.

- Project Management

  We teach you the fundamentals of Agile and Lean development and project management on your own project so that when you join a company you're prepared and ready to work in a team.

- Continuous Integration and Deployment

  Modern software development is never only about writing software. You learn the entire Software Development Life-cycle with lectures on CI/CD getting familiar with Docker and its ecosystem, and Google Cloud



Module 1: Introduction with HTML, CSS & JavaScript

Description

In this first module, you'll build a solid foundation in web development with HTML, CSS, and JavaScript, the core technologies behind every website and web app. You'll learn how to structure content, design responsive layouts, and bring interactivity to life.

Beyond coding, we explore software thinking: business models, product workflows, Lean practices, and tools like Git, GitHub, Kanban, and Balsamiq. You'll also develop problem-solving skills and learn how AI can support your daily work as a developer.

From day one, you'll build real project in a hands-on, storytelling format, gaining a deep understanding of how modern web applications are planned, structured, and brought to life.

By the end of this module, you'll be able to create fully functional web interfaces, debug and structure clean code, and collaborate confidently in a team. You'll not only write code, you'll start thinking like a software engineer.

Duration: 4 weeks, 200 UE (lesson units) Price: 2,720 Euro

Topics Covered

Business Model & Software Design
- Modeling and designing real-world solutions in code

Architecture & Code Quality
- Debugging with ChromeDevTools

Project & Product Management and Software Development Lifecycle
- LEAN Practices & Kanban
- Planning Minimum Viable Products and product phases
- Prototyping with Balsamiq
- Working in an engineering team and understanding the engineering team culture
- Communication with stakeholders

Frontend Development
- HTML5
- CSS3
- JavaScript
- Responsive Web Design

Cross-functional Topics
- Source Code Management: Git and GitHub
- Problem solving and root cause analysis
- Breaking down problems into manageable pieces and prioritization
- Best practices for clean code and long term maintenance
- Effective habits for self-improvement
- Career coaching



Module 2: Building web applications with MongoDB, Node.js, and Vue.js

Description

In this module, you'll learn how to build secure, scalable back-end systems and connect them to dynamic front-ends using Vue.js, chosen for its simplicity and flexibility.

You'll dive into full-stack architecture, authentication, and deployment, while learning to craft clean, maintainable solutions that hold up in real-world scenarios.

Hands-on experience comes through building your own project (web application), collaborating in teams, and applying cloud services in production-style environments.

By the end of the module, you'll be ready to build, secure, and deploy full-stack applications with confidence—from database to browser.

Duration: 6 weeks, 310 UE (lesson units)
Price: 4,445.40 Euros

Topics Covered

Business Model & Software Design
- Modeling and designing real-world solutions in code
- Object-Oriented Programming
- UML Diagrams & PlantUML

Architecture & Code Quality
- SOLID Principles
- End-to-End Testing
- Debugging with Node.js and ChromeDevTools
- REST API Design

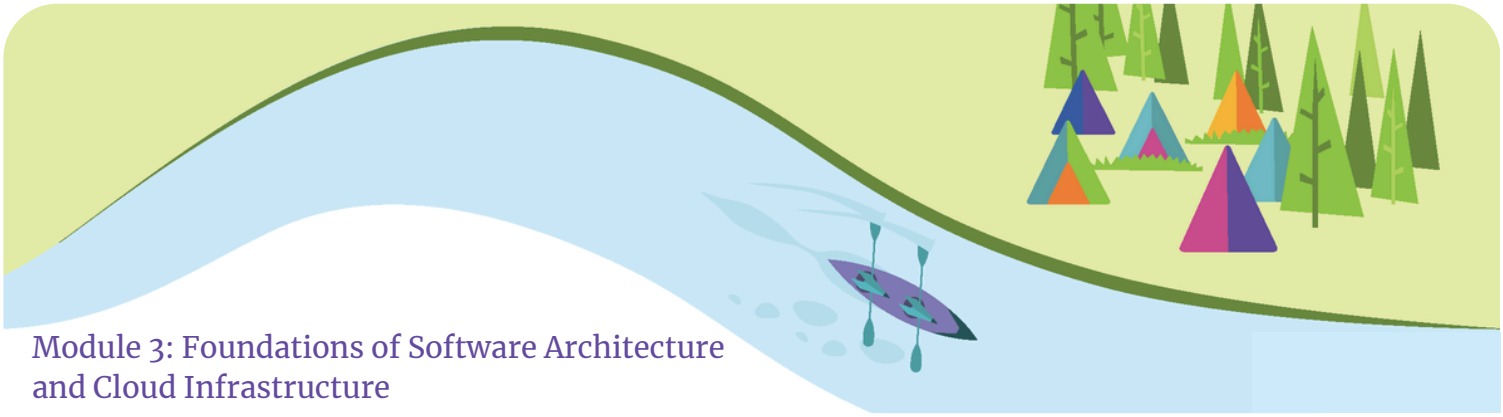
Project & Product Management and Software Development Lifecycle
- LEAN Practices & Kanban
- Working in an engineering team and understanding the engineering team culture
- Communication with Stakeholders

Frontend Development
- HTML5
- CSS3
- JavaScript
- Responsive Web Design
- Vue.js and Pinia

Databases
- Relational and non-relational databases
- Purposeful DB design
- MongoDB
- Mongoose ODM

Backend Development
- Node.js
- Express.js and Pug
- Authentication with Passport.js
- Session Management with Express-Session

Cross-functional Topics
- Source Code Management: Git and GitHub
- Problem solving and root cause analysis
- Breaking down problems into manageable pieces and prioritization
- Best practices for clean code and long term maintenance
- Effective habits for self-improvement
- Career coaching



Module 3: Foundations of Software Architecture and Cloud Infrastructure

Description

IIn the final module, you'll bring your skills to a professional level by tackling advanced topics such as state management, security, testing, and deployment.

You'll deepen your understanding of full-stack architecture and learn to build high-performance applications using advanced JavaScript techniques and Google Cloud services.

The curriculum integrates DevOps principles like CI/CD, performance tuning, and automated testing, essential for building resilient and maintainable systems.

A standout of this module is the capstone project, where you'll take the application you started in Module 1 and brought to life in Module 2 into its final stage—refining it, deploying it, and preparing it for real-world use. You'll also publish an open-source library to NPM, demonstrating your skills and giving back to the developer community.

By the end of the module, you'll be equipped to deliver production-grade software with confidence—combining deep technical expertise, industry-ready workflows, and a portfolio that sets you apart.

Duration: 4 weeks, 200 UE (lesson units) Price: 2,838 Euros

Topics Covered

Architecture & Code Quality
- SOLID Principles
- Design Patterns
- Event-Driven Architecture
- GUI Architectures

Project & Product Management and Software Development Lifecycle
- Working in an engineering team and understanding the engineering team culture

Frontend Development
- Accessibility

Databases
- MongoDB Aggregation

Backend Development
- External API Integration
- Real-time data communication with Socket.io
- Publishing an open-source library to NPM
- Security

Databases
- Docker + Docker Compose
- Automated Unit, and IntegrationTesting
- Deployment with Google Cloud Run

Cross-functional Topics
- Problem solving and root cause analysis
- Best practices for clean code and long term maintenance
- Effective habits for self-improvement
- Career coaching



Fully fundable by the Agentur für Arbeit !

100% FREE WITH BILDUNGSGUTSCHEIN

We are certified and accept the Bildungsgutschein

You could be eligible for our program with a Bildungsgutschein if you:

- are registered unemployed with the Agentur for Arbeit or Jobcenter
- have a university degree or equivalent relevant working experience
- can speak and write in English at least at B1 level
- have a suitable computer
- and stable fast internet connection

Earn your certificate from Coyotiv and break into the tech industry with hands on learning and experience.

Plus: Complete Career Coaching package included!

Learn from our dedicated Career Coach how to build your CV and Linkedin profile. Dive deep into application process preparations with mock interviews and mindset training.

Our instructors and career coach share valuable insights and lessons from years of experience in recruiting in the tech industry

In the end you will be able to master finding the right job ads for you, prepare yourself for the application process and ace not just the technical interview but the soft skill questions as well.

AZAV CERTURIA Certification Germany TRÄGERZULASSUNG

Do you have further questions?

Get in touch with us!

Feel free to book a 15-minute complimentary video call with us for any questions you might have:

030 863 20 90 83

contact@coyotiv.com

www.coyotiv.com

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