AI+ Vibe Coding Practitioner™(AVIBE)

ID AVIBE **Prix** CHF 497,– (Hors Taxe) **Durée** 0,5 jours

A qui s'adresse cette formation

- Aspiring Programmers: Beginners eager to start their coding journey with the power of AI-driven learning and automation.
- Tech Enthusiasts: Individuals fascinated by how AI transforms coding, app development, and digital innovation.
- Students and Graduates: Learners seeking a practical foundation in programming enhanced by real-world AI applications.
- Career Switchers: Professionals from non-technical backgrounds looking to enter the tech industry through AI-assisted coding.
- Entrepreneurs and Creators: Innovators aiming to build smarter products, automate processes, and bring AI-powered ideas to life.

Pré-requis

Basic Computer Skills, Understanding of algebra and basic statistics, Logical Thinking, Programming Curiosity, English Proficiency

Objectifs

- Empowers Intelligent Development: Learn to integrate AI into coding workflows to build smarter, more adaptive applications.
- Boosts Productivity: Automate repetitive programming tasks and streamline software development using AI-driven tools and assistants.
- Bridges Creativity and Code: Combine technical expertise with creative problem-solving to design innovative, human-centered digital experiences.
- Future-Proofs Your Career: Gain in-demand AI coding skills that are reshaping industries and redefining the developer's role.
- Prepares for Real-World Impact: Apply AI in real coding environments to develop scalable, intelligent, and efficient solutions for diverse domains.

Contenu

Module 1: Introduction to Vibe Coding & AI Tools

- 1.1 What is Vibe Coding?
- 1.2 Evolution of AI in Software Development – Low Code vs No Code vs Vibe Coding
- 1.3 Overview of Common AI Coding Tools by Functionality
- 1.4 SDLC for a Vibe Coding Product
- 1.5 Hands-on Lab: Familiarizing Learners with Multiple AI Coding Tools
- 1.6 Case Studies

Module 2: Prompting for Code – Basics & Best Practices

- 2.1 Anatomy of a Good Prompt
- 2.2 Prompt Types – Instructive, Descriptive, Iterative
- 2.3 Prompting Patterns – Zero-Shot, Few-Shot, Chain-of-Thought
- 2.4 Hands-on Lab: Practice Zero-Shot, Few-Shot, and Chain-of-Thought Prompting
- 2.5 Use-Case 1: Creating a Python Calculator
- 2.6 Use-Case 2: Optimizing AI-generated Code Using Different Prompt Types

Module 3: Debugging & Testing via AI

- 3.1 Reviewing and Refining AI-generated Code
- 3.2 Prompting for Bug Fixes and Test Coverage
- 3.3 Using AI-generated Unit Testing
- 3.4 Detecting Hallucinations and Unsafe Code
- 3.5 Hands-on Lab: AI-Assisted Debugging and Unit Testing
- 3.6 Activity Section

Module 4: Building a Simple Full-Stack App with Prompts

- 4.1 Planning the App: Frontend + Backend
- 4.2 Using IDEs and Code Generators to Scaffold Code
- 4.3 Connecting Components Using Natural Language
- 4.4 Deploying and Testing the MVP in Simulated Environment
- 4.5 Hands-on Lab: Building and Connecting the Frontend and Backend for Contact Form Submission
- 4.6 Hands-on Lab: Building a Standalone Desktop Calculator Application Using Tkinter
- 4.7 Hands-on Assignment 1: Task Management System – Full-Stack Development Using Prompts

Module 5: Code Ethics, Security, and AI Limits

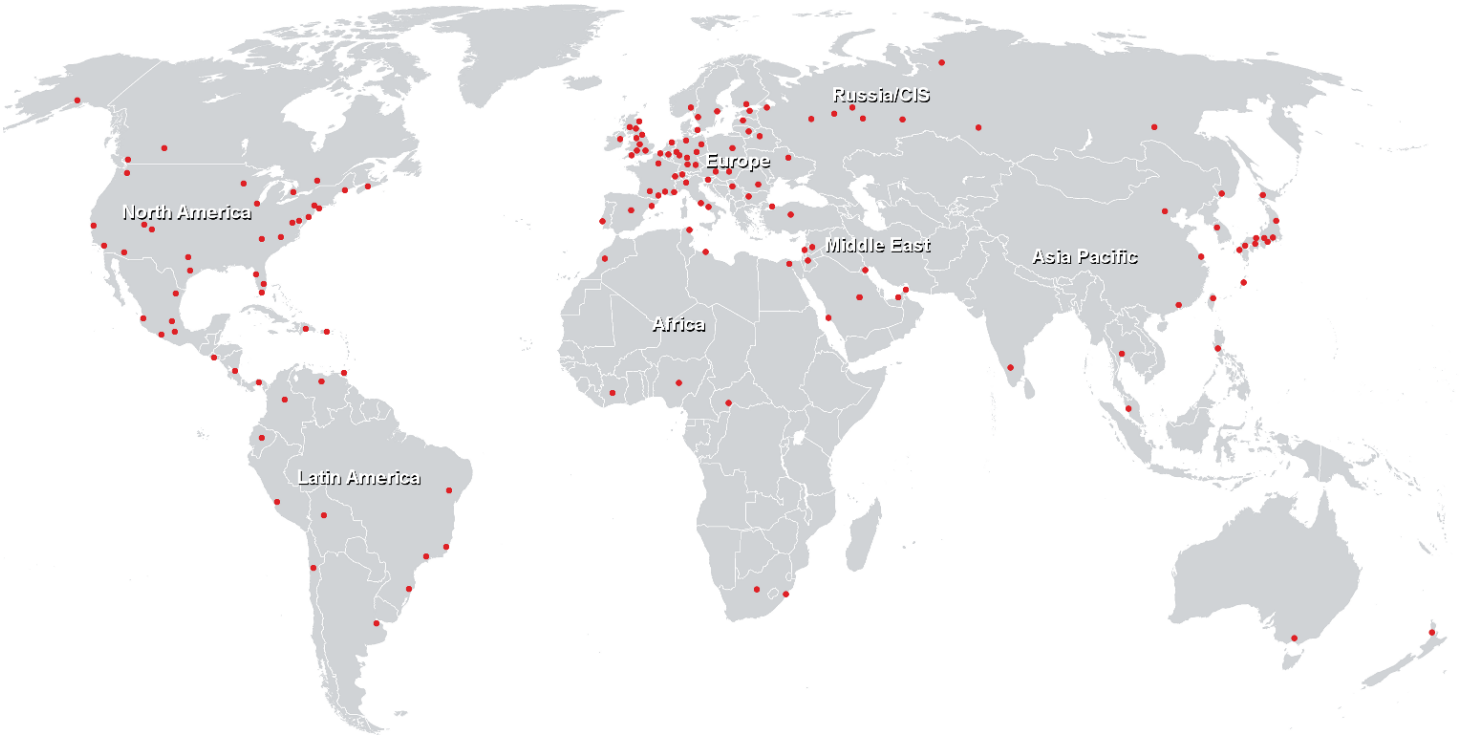
- 5.1 AI Limitations and Biases
- 5.2 Prompt Injection and Mitigation Strategies
- 5.3 Data Privacy and Secure Coding
- 5.4 Responsible Use of AI in Production
- 5.5 Hands-on Lab: Build Awareness of AI Limitations and Responsible Practices

Module 6: Capstone Project – Prompt-Driven App

- 6.1 Apply All Learned Skills in a Real-World Project
- 6.2 Collaborate and Iterate Using AI Tools
- 6.3 Demonstrate End-to-End Development Using Prompts
- 6.4 Capstone Project Use Case: AI-Powered To-Do List Application
- 6.5 Capstone Project Use Case: AI-Powered Note-Taking Desktop App
- 6.6 Assignments

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Centres de formation dans le monde entier





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