Developing web applications with artificial intelligence

A practical programme for employees learning to build modern web applications with AI, from an initial interface to a working project and publication.

Volume	120 academic hours (45 minutes each)
Dates	On request
Structure	60 contact + 20 supervised mentoring + 40 independent hours
Tutor	Nikolay Sekachev
Group	Formed at the employer's request
Teaching language	Russian; other languages subject to agreement
Format	120 academic hours: 60 contact + 20 supervised web/project mentoring + 40 independent
Price	2990 € per employee, including 24% VAT

One academic hour is 45 minutes. Group dates are shown in the programme details; the detailed timetable is agreed with the employer.

Who it is for

- employees new to programming
- employees working with digital products
- designers and product specialists
- company teams building an internal prototype

Learning outcomes

- understand the structure of a modern web application
- use AI as a development tool and check its results
- build a project's interface, logic and data structure
- connect external services and publish a solution
- present a project against the programme requirements

Module content and hours

120 academic hours: 60 contact hours, 20 hours of supervised web/project mentoring with the tutor and 40 independent hours. Each module combines a practical task, feedback and an applicable work result.

Supervised mentoring: Work with the tutor online or in a project workshop: discuss the module task, check the result and receive feedback.

01. AI development basics and briefing an assistant

6 contact + 2 supervised web/project mentoring + 4 independent academic hours

How AI, machine learning and language models work; setting up Cursor, Cline and other AI tools, breaking an idea into tasks and working with a CLI.

Practical assignment: Build a small console application, such as a password generator, by instructing an AI assistant.

Learning methods: Interactive explanation, tool demonstrations, review of completed work and practice briefing AI.

02. From idea to a first website: HTML, CSS and AI-assisted design

6 contact + 2 supervised web/project mentoring + 4 independent academic hours

Browser-side fundamentals, the roles of HTML and CSS, image generation and references for designing an initial interface.

Practical assignment: Build a responsive one-page business website using an AI tool.

Learning methods: Practice in an AI IDE, visual review and iterative design improvements.

03. JavaScript interactivity

6 contact + 2 supervised web/project mentoring + 4 independent academic hours

Describing interface behaviour: events, responses, the DOM and basic logic for interactive page elements.

Practical assignment: Add animations, modal windows and other interactions to the website.

Learning methods: Demonstration, review of implemented interactions and AI-assisted debugging.

04. Modern frontend: a React and Vite SPA

6 contact + 2 supervised web/project mentoring + 4 independent academic hours

Moving from a static page to a single-page application; React components, Vite builds and npm.

Practical assignment: Turn the static website into a multi-screen React application with a component structure.

Learning methods: Explanation, guided AI code generation and application refactoring.

05. Backend development and REST API design

6 contact + 2 supervised web/project mentoring + 4 independent academic hours

Server-side fundamentals, the client-server model, REST APIs and briefing AI to build a Node.js or Python backend.

Practical assignment: Brief AI to create a blog API with a basic set of endpoints.

Learning methods: Interactive explanation, API testing and technical briefing practice.

06. Databases and data handling

6 contact + 2 supervised web/project mentoring + 4 independent academic hours

When to use SQL and NoSQL, CRUD operations and describing a data structure so that AI can build tables and relationships correctly.

Practical assignment: Connect PostgreSQL to the API and store project data.

Learning methods: Database practice, structure review and modelling a work scenario.

07. Full-stack integration and external AI services

6 contact + 2 supervised web/project mentoring + 4 independent academic hours

Connecting frontend and backend, exchanging data, integrating external AI services and following a request through the system.

Practical assignment: Integrate the SPA with the API and add an AI content-generation feature.

Learning methods: Full-cycle demonstration, full-stack examples and debugging across components.

08. Publishing online: PaaS and VPS

6 contact + 2 supervised web/project mentoring + 4 independent academic hours

Hosting, deployment, PaaS platforms, virtual servers, Linux and Nginx for publishing a working project.

Practical assignment: Deploy the application to a PaaS platform and a dedicated VPS.

Learning methods: Step-by-step demonstration, availability checks and diagnosis of common deployment problems.

09. Final project: architecture and building a product

6 contact + 2 supervised web/project mentoring + 4 independent academic hours

Choosing an idea, designing its architecture, planning the technology stack and starting a full-stack project for assessment.

Practical assignment: Start building an individual solution and receive feedback during development.

Learning methods: Group discussion, individual guidance and project work.

10. Launch, project presentation and next steps

6 contact + 2 supervised web/project mentoring + 4 independent academic hours

Completing and publishing the project, preparing a presentation and demonstrating the programme's practical result.

Practical assignment: Present a working project and record its next development steps.

Learning methods: Individual guidance, final project work and project presentations.

Assessment and completion

Assessment uses the practical assignments and final work described in the modules. The participant demonstrates the result and explains their decisions. Specific assessment criteria and participation requirements are agreed before an order is confirmed. A certificate (tunnistus) is issued when the programme conditions are met and all learning outcomes are achieved. Where outcomes were not assessed or not all were achieved, a participant receives a statement (tõend) showing actual participation.

A certificate (tunnistus) is issued after the programme's learning outcomes and completion requirements have been met. Other learners who participated receive a record of participation (tõend).

Trainer and qualifications

Nikolay Sekachev. MBA, astrophysicist, lawyer

Neurokool tutor specialising in the practical use of AI, AI agents, automation and modern digital tools.

- University of New Mexico - Master of Business Administration (MBA)
- Higher education in astrophysics
- Higher education in law

Ordering, payment and employer support

The customer is the employer. The price is per employee for this course, including 24% VAT. The group total, tools and any additional costs are stated in the offer before acceptance.

Unless otherwise agreed in writing: payment within 7 calendar days of the invoice date and before training starts. Employer cancellation at least 14 days before the start receives a 100% refund; 7-13 days before the start, 50%; less than 7 days before the start and after training starts, no refund. An eligible replacement participant may be agreed at no additional charge before the start. If GP cancels, the full fee is refunded within 14 calendar days. The full terms and exceptions are linked below.

An employer may independently apply for a training grant to develop employees' digital skills if the current conditions are met. The application must be submitted before training starts. A direct provider partnership with Töötukassa and a course listing are not required for this particular employer grant. Töötukassa decides eligibility and the amount; free training and reimbursement are not guaranteed. This is a separate process from koolituskaart.

Full business terms: https://neurokool.ee/en/terms/

Official Töötukassa conditions: https://www.tootukassa.ee/et/teenused/tooandjatele/koolitustoetus-tooandjatele-tootaja-ikt-oskuste-arendamiseks

Personal data

Exercises use anonymised or specially prepared information. Confidential information, client data, passwords and access credentials must not be entered into external AI services without a lawful basis and company authorisation. GP Training Center OÜ processes enquiry and training information according to its privacy notice.

Privacy notice: https://neurokool.ee/en/privacy/

Provider contact details

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Current course page: https://neurokool.ee/en/programs/veebirakenduse-arendus/

Programme information edition. This is not a signed contract, an enrolment confirmation or a funding decision. The individually agreed offer and relevant curriculum determine the conditions of a particular group.