Artificial Intelligence for Children: Basics and Practice Course

Learning goals are to learn how to use artificial intelligence to solve creative problems through practical exercises, to gain skills working with different types of neural networks and to create a digital portfolio as a website applying the acquired skills.

Module 1. Introduction to Neural Networks and AI

Day one — **Introduction to artificial intelligence**

− What are neural networks and when did they appear?
− What will help, what new professions are associated with them?
− We will gain new skills and learn to apply them in real life and in school.
− Practice: generating texts for various purposes in ChatGPT.
− Practice: generating a website layout using Galileo AI.
− Practice: rendering/generation web page prototype.

Learning outcome: got acquainted with the concept and application of AI in practice, created a mock-up of a portfolio website.
Practical task: text and image AI generation.

Day two — **Creating the prototype of a portfolio website**

− Fundamentals of web development: who builds websites and how?
− How websites work: introduction to HTML, CSS, and JavaScript.
− Generating website code using ChatGPT. Updating the site code using HTML/CSS.
− Introduction to image stock platforms and selecting visuals for the project.

Learning outcome: learned the basics of web development, generate a website code with AI, learned how the site works from the inside.
Practical task: generating the page code of your site using AI, updating the code.

Day three — **Enhancing the Website with ChatGPT**

− Analyzing and improving the website. Refining the page using ChatGPT prompts.
− Creating a logo for the website.
− Uploading the website code to an external hosting platform.
− Learning how to write effective prompts to improve content.

Learning outcome: completed the generation of the portfolio site page.
Practical task: work with text queries, selection of prompts.

Day four — **Creating a Website with Mobirise**

− What are prototypes and how are they used in web design?
− Introduction to Mobirise: hands-on demonstration.
− Practice: Creating another project using text-based AI prompts.
− Comparing and analyzing two website creation methods. Module summary and quiz.

Learning outcome: learned to create website prototypes with Mobirise and finalized portfolio website.
Practical task: create website prototype with Mobirise.

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Module 2. Image Generation with AI

Day one

Introduction to AI image generation

− What AI image generators can do and how they work?
− Ethics and rules of using AI-generated content.
− What are prompts and how to write them effectively?
− Practice: Generating images with Fusion Brain, experimenting with different prompts.

Learning outcome: understood the basics of image generation using AI.
Practical task: generating images with Fusion Brain.

Day two

Image Processing and Enhancement

− Introduction to online image generation and editing tools.
− AI image generators prompt practice.
− Using various AI tools for image processing and enhancement.

Learning outcome: learned to process and improve images with AI generation for the portfolio site page.
Practical task: generating images with Fusion Brain, styling and enhancing them with different AI tools.

Day three

Advanced Image Editing

− Tasks in image editing: what they involve?
− Introduction to online image generation and editing tools.
− Image processing techniques: live demonstration.

Learning outcome: learned to process and improve images for personal projects to refine their portfolio visuals using advanced AI techniques.
Practical task: image generation using Fusion Brain, image processing and stylization.

Day four

Working with Leonardo AI

− Introduction to Leonardo AI.
− Creating temporary email accounts (TempMail) for AI tool access.
− Generating images with Leonardo AI.
− Exploring image editing tools within Leonardo AI.
− Practice: Enhancing and refining portfolio images.

Learning outcome: made new images for their portfolio and improve their image-generation skills.
Practical task: generating and editing images with Leonardo AI.

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Module 3. Creating video with AI

Day one   **AI Video Generation Basics (Part 1)**

− Tasks in video generation. Applications of AI-generated videos.
− Introduction to Immersity AI.
− Converting 2D images into 3D objects for video.
− Developing a video concept.

Learning outcome: studied the basic techniques of video generation and created the first AI-generated video.
Practical task: generating videos with Immersity AI.

Day two   **AI Video Generation Basics (Part 2)**

− Exploring InVideo AI features.
− Using prompts to refine and enhance generated videos.
− Introduction to video stock platforms.
− How to download videos from stock libraries?

Learning outcome: learned advanced video generation techniques.
Practical task: generating and editing videos with InVideo.

Day three   **Basics of Video Editing with CapCut**

− The role of video editing.
− Basic skills in CapCut.
− Practice: Creating and editing a short video clip.

Learning outcome: learned new video processing techniques, gained hands-on experience in video editing and edited video clip.
Practical task: editing your video clip with CapCut.

Day four   **Assembling Your Video Project**

− Importance of keywords for video promotion.
− Creating a blogger's assistant bot with Imagica AI.
− Preparing video elements using learned AI tools.
− Video editing and finalizing.
− Practice: Create, edit and complete video clip using AI.

Learning outcome: complete their video project and learned about video promotion.
Practical task: create, edit and complete your video clip.

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Module 4. Sound, Music & Final Project

Day one

Voice and Sound Generation with AI

− Introduction to AI voice generation and voice cloning.
− Understanding deepfakes: what they are and why they can be dangerous?
− Selecting a voice for video narration, live demonstration.
− Practice: dubbing your video with AI-generated voice

Learning outcome: learn to generate and use voiceovers for their projects.
Practical task: selecting a voice for dubbing your video, voicing your video project.

Day two

Creating Music with AI

− How music is created today: humans vs. AI.
− Copyright issues and why AI music is a safer choice.
− Introduction to Udio – an AI music generator.
− Practice: Creating background music for your video project.

Learning outcome: learned to create original music with AI.
Practical task: creating original music for their videos.

Day three

Final Video Editing & Project Presentation Prep

− Finalizing the video in CapCut.
− Preparing a presentation about the course project.
− Creating a presentation draft using Gamma App (AI-powered tool).
− Practice: creating a final presentation draft.

Learning outcome: completed their video and begin preparing for the final portfolio showcase, finalized the course project - digital portfolio.
Practical task: final video edit, creating the presentation draft.

Day four

Final Lesson. Project Showcase

− Finalizing presentation slides.
− Uploading all projects to the digital portfolio website.
− Rehearsing the presentation.
− Presentation: Showcasing final projects to peers and parents.
− Discussion of course results and future learning paths in digital technologies and AI.

Learning outcome: complete course project, present their digital portfolio, and receive personalized recommendations for further development.
Practical task: participation in course project demonstration.