Laba.IT

facebook.com/LabaIT.Poland | linkedin.com/showcase/laba-it/ | www.instagram.com/laba_it

Diploma supplement

Oleksii Zemliakov

COURSE: Unreal Engine Game Developer

COURSE DATES: 17.02.2026 – 30.06.2026

The course program included, among others:

1. Loops and Functions in C++
loops: for, if, while; functions; local and global variables; function implementation in UE5

2. Blueprint in UE5
actors in Unreal Engine and their variables, functions, events, and macros; creating custom events, their input and output data, Game Mode, Game Instance, Player State, and Dispatchers

3. Object-Oriented Programming
classes, constructors and destructors, variable access, class implementation in C++

4. Building your own world
building a level using boxes, landscape elements, and painting the terrain and lighting

5. Input – controlling your own pawn
movement component, player controller, Input Mapping Context, motion vectors

6. Collisions and interactions with objects
collision channels, line trace, overlap, teleporting a character to a specific location

7. Advanced Data Structures
Blueprint Function Library (BFL), DataTable, charts, structures

8. Animations – Edits and States
Animation Sequence vs. Animation Montage – Differences and Uses, Animation Montage, Animation Notify, Animation State

9. Artificial Intelligence in Unreal Engine
AI Controller, Nav Mesh, Behavior Tree, Blackboard, Decorators and Services, Perception Component

COURSE RESULT: new skills obtained by finishing practical assignments.
The course was completed with distinction.

Adrian Sawko
Lead Gameplay Programmer
at 11 bit studios
course lecturer

Adrian Sawko

Jakub Kapuściński-Bernatek
Senior Gameplay Designer
at CD PROJEKT RED
course lecturer

Jakub Kapuściński-Bernatek

Date:
30.06.2026

RIS registration number:
2.14/00042/2024