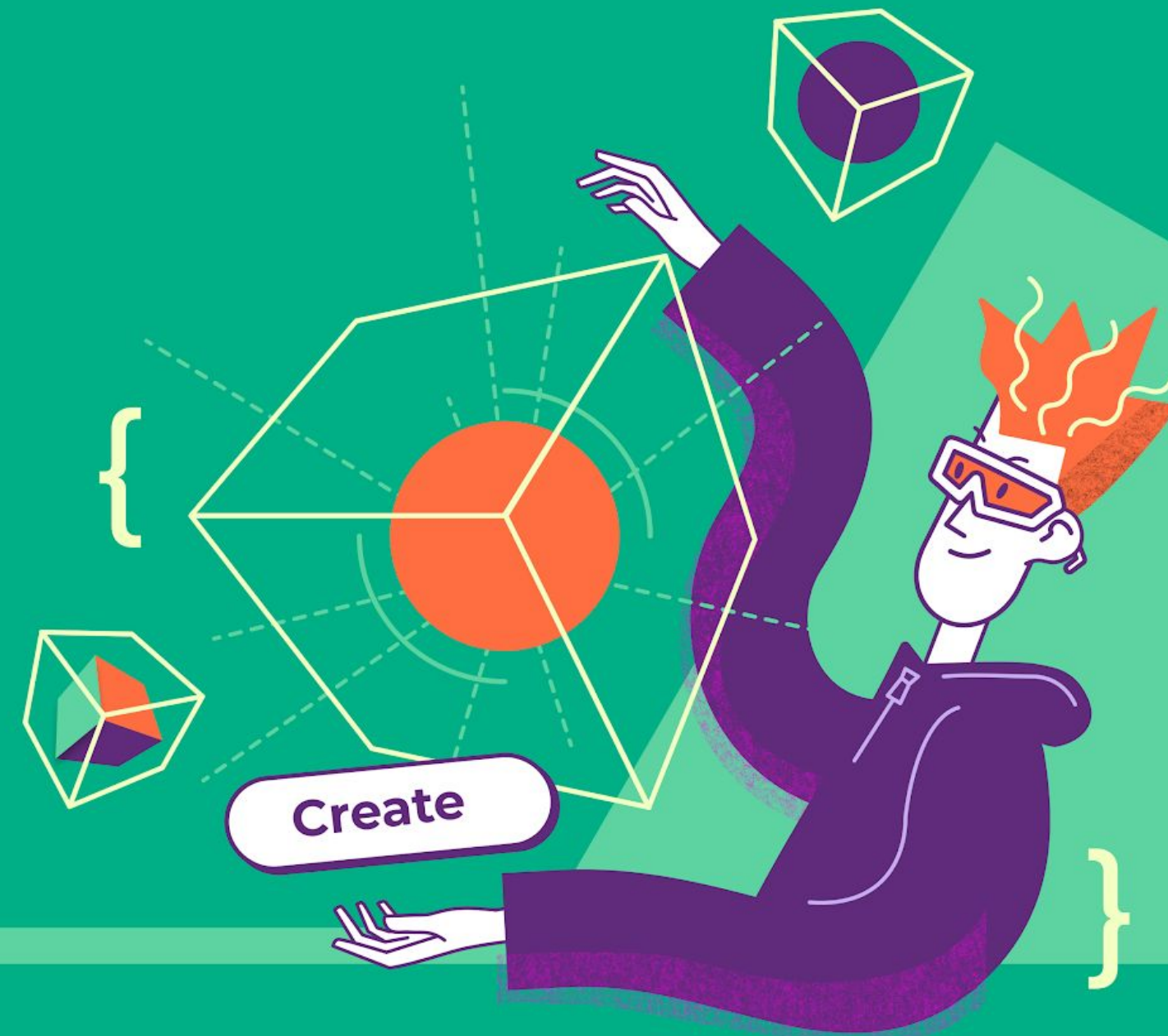


Algorithmics
programming

Unity Game Development

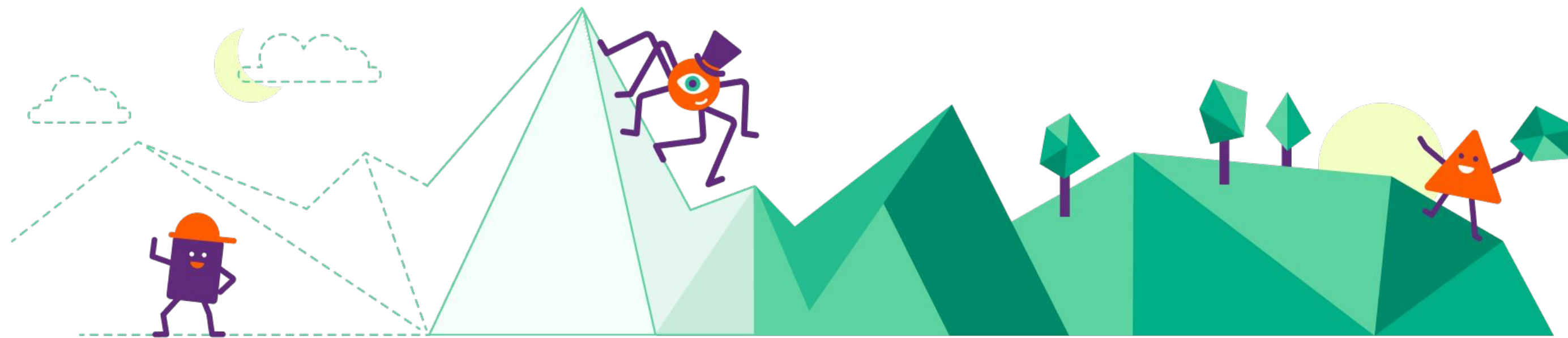
A course for kids aged 12-16

Creating our own worlds using 3D modeling and programming

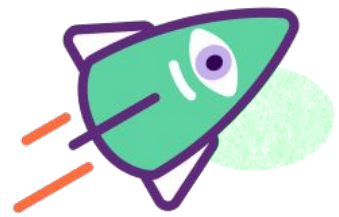


World builders

Some kids don't dream of becoming actors, but movie directors — so they can share their vision of the world with other people. There are kids who don't want to play games, but instead create their own worlds. This course is for them.

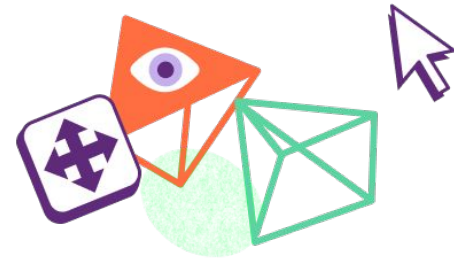


Everyone will enjoy it!



Visible results

The Unity engine and an introduction to the basics of programming allows our kids to turn their most daring ideas into reality



High levels of motivation

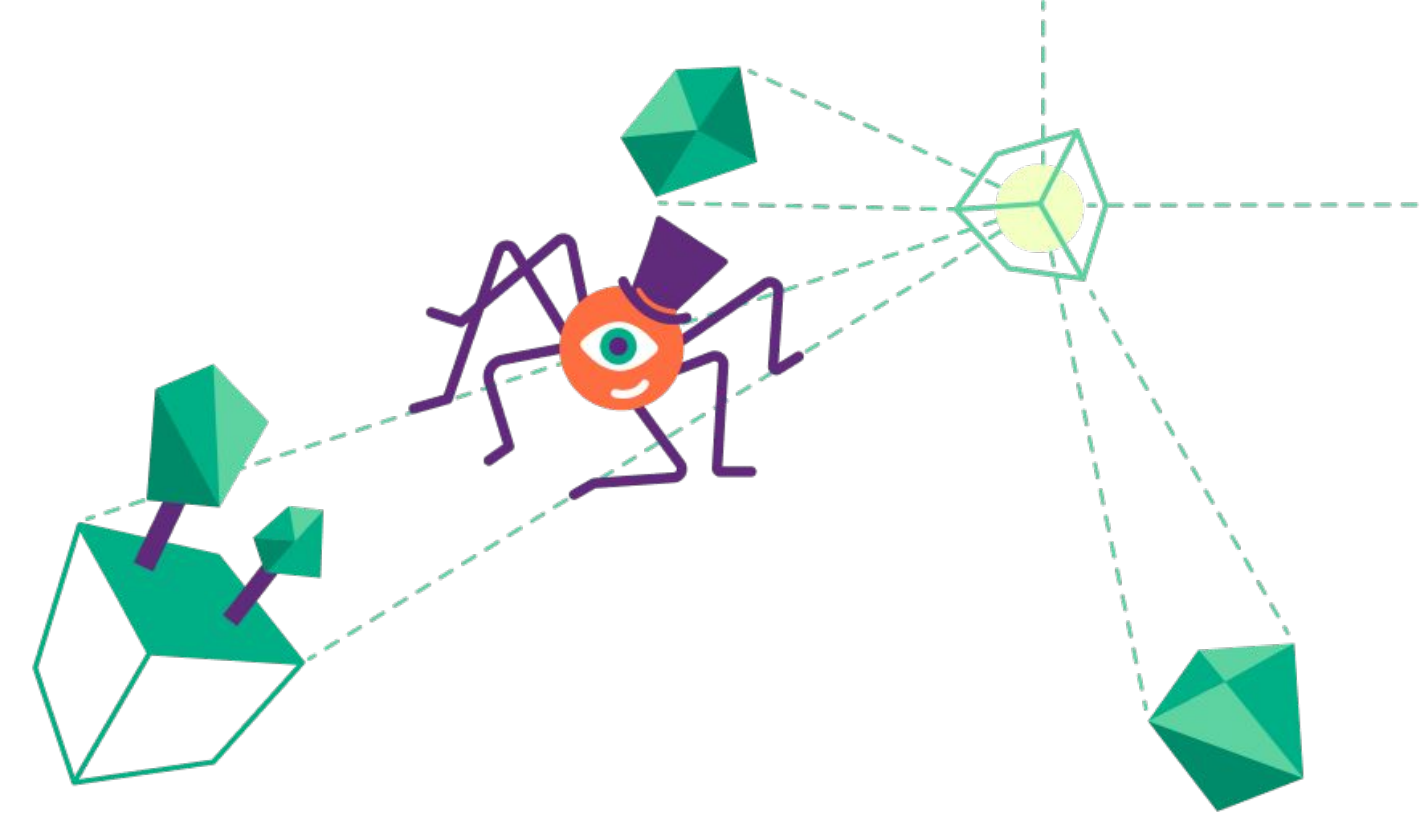
Many popular games have been created based on Unity. With the new knowledge they acquire, teenagers also gain the freedom to make a game that the whole world will come to know



A low entry threshold

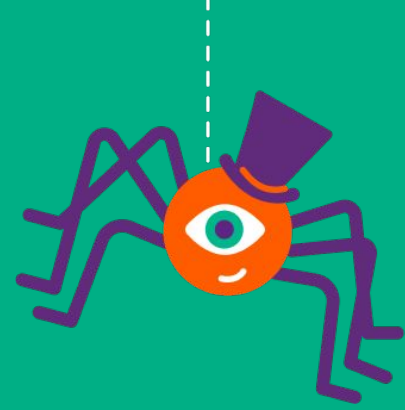
The course will be interesting both for those who are already familiar with game engines and for those who have never created their own games

Our teenagers learn:



- ◆ To use the basic Unity tools to implement their own ideas
- ◆ To create atmospheric games with object physics, lighting, and particle systems
- ◆ To develop game levels like a real level designer

- ◆ To write code in C#, to work with scripts, variables, and data types
- ◆ To plan work on a project, function as a team and present their results



Why Unity?

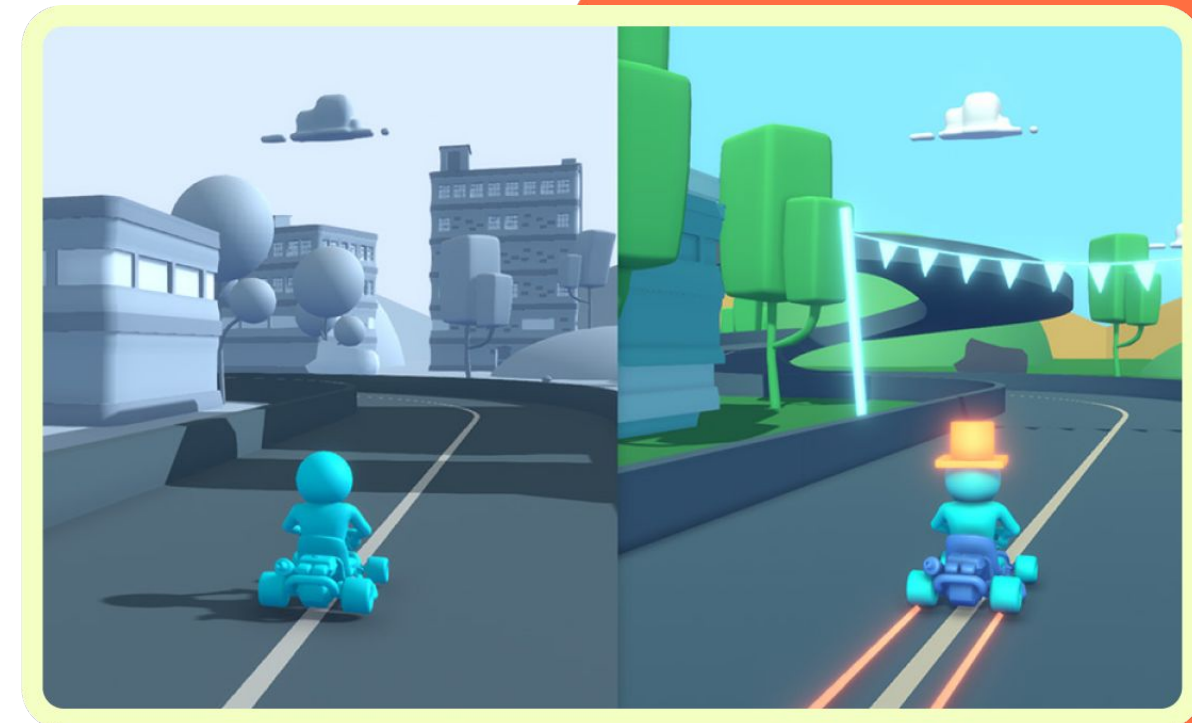
Unity is a real-time 3D content development platform that includes computer and mobile games.

- ◆ The Unity engine allows you to create games for the most popular platforms
- ◆ For a novice developer, the Unity platform is free
- ◆ Recommended age for working with Unity: 12 years and older
- ◆ It has a wide scope of application: architecture, construction and design, cinema and animation, games for mobile phones, PCs and consoles



A project-based approach

- ◆ From the very first classes, the guys create mini-projects, applying the knowledge they have gained in practice
- ◆ They share projects with classmates directly within the platform and learn to give and receive feedback at the end of each module
- ◆ They present a full-fledged individual or group project



How do our lessons work?

- **Online or at the Algorithmics school** in your city
- In groups **of up to 6 students** online and up to **12 students** offline
- **90 minutes** with a break
- **Once a week,**
1 academic year

The **teacher** explains the material in an accessible way and gets the children interested in the new topic

The children won't lag behind in the program: **missed lessons can be taken on the platform 24/7**

You don't have to check homework: **there are no mandatory homework assignments** at Algorithmics

You will get access to our platform and be able to monitor your child's progress

Course plan – 3 Levels

Beginner

Module 1. Unity Basics

1. Introduction to Unity.
2. Working with game objects and prefabs.
3. Working with materials and textures.
4. Creating a prototype of a game level.

Module 2. 3D level design

1. Getting started with a landscape.
2. Landscape detailing.
3. Lighting settings.
4. Visual and sound effects.

Intermediate

Module 3. Programming video games in C#

1. Introduction to the C# language.
2. Variables and data types.
3. Conditional constructions.
4. Loops.
5. Objects and methods.
6. Classes.
7. User input.

Module 4. Animating 3D objects

1. Introduction to animation.
2. Working with an animator. Animating a humanoid.
3. Working with an animator. Animation of other objects.
4. Creating a video game trailer. CG video.

Advance

Module 5. The specific features of 2D games. Mobile platform.

1. Introduction to 2D games.
2. Animating 2D games.
3. Physics in 2D games.
4. Build for Android and Play Market.

Module 6. Creating a 3D racing game

1. Introduction to the genre of racing games.
2. Level design for a racing game.
3. Programming the logic of a racing game. Part 1.
4. Programming the logic of a racing game. Part 2.

Module 7. Creating a 3D role-playing game

1. Introduction to the RPG genre.
2. Level design for RPG games.
3. Programming the logic of an RPG game. Part 1.
4. Programming the logic of an RPG game. Part 2.

Why do people choose **Algorithmics?**

- ◆ The programs of our courses are developed by a team of professional **methodologists, teachers and psychologists**
- ◆ Algorithmic **teachers** speak the same language as the children, love their subject and know how to get teenagers interested in it
- ◆ Our **educational IT platform** is 3-in-1: it's a smart textbook, an environment for creating projects, and a community of interests



Algorithmics

International School of Programming
for children aged 6 to 17

😊 1 100 000 graduates


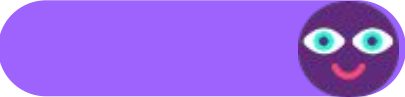




🚩 90+ countries

🏠 515 partners



Courses for kids aged 6-17

Kids can start studying at Algorithmics at any age. At the end of the course, students can move straight on to the next one to continue studying in the new academic year

Course name	Age:	5 – 6	7 – 9	10 – 11	12 – 13	14 – 15	16 – 17
Python Pro (2 years)							
Python Start (2 years)							
Game Development on Unity							
Game Design							
Visual Programming							
The Coding Knight							

Algorithmics

**Book a place in
one of our groups**

<http://algorithmicschool.nl/>

