

### NUOVA ACCADEMIA DI BELLE ARTI





# SUMMER COURSES

# Game Development

2nd SESSION: July 11th – July 21st 2023



### GAME DEVELOPMENT

School: NABA, Nuova Accademia di Belle Arti Address: Via Darwin 20, 20143 Milan, Italy Phone: + 39.02.973.192 E-mail: <u>summer@naba.it</u> Course Structure: 45 hours – 9 lesson days ECTS: 3 ECTS credits\*

\*ECTS credits only awarded to university students or participants who are completing or have completed a university or academic study path

#### TITLE – AREA

Game Development (Introduction Level)

#### **COURSE DESCRIPTION**

This course focuses on how to create video games using Unity 3D, a free-to-use game development engine. Students will have the opportunity to develop 3D gaming experiences with sophisticated storylines, interactions, aesthetics, and technical aspects.

Moreover, they will discover the features of the software while designing the very first game - starting from learning the steps of a project and manage the game assets.

Students will practice the elements of building a fully playable prototype in Unity: installation and setup, pathfinding, lighting and light mapping, artificial intelligence basics, camera animations, character animations, scripting, materials, skyboxes, sound effects, and music.

#### **COURSE OBJECTIVES**

The course has been designed to provide international students the necessary skills in game development in order to make a game prototype.

#### ADMISSION REQUIREMENTS

This course is intended for students who have no background in game development and who are attending or will attend their first year of university studies in art and design.

#### OUTPUT

Students will learn the steps needed to design and create a fully playable environment - concept and design, lightning & lightmapping, camera control, materials, character movement.

#### LIST OF MATERIALS AND TOOLS to be brought by students

Laptop with latest Unity3D software version installed through Unity Hub (https://store.unity.com/download). Photo-editing software, such as Photoshop or Gimp, will be considered a plus.



#### ATTENDANCE POLICY

Class attendance is required for successful completion of the course. Attendance will be taken every class period. On the last day of classes, instructors will issue a Certificate of successful attendance only to all students who completed at least 80% of the course.

#### **COURSE POLICY**

The Faculty of NABA takes Academic integrity seriously. Instances of academic dishonesty such as plagiarism won't be tolerated.

Mobile phones will be kept switched off all the time during class. Use of laptop during classes for personal purposes is forbidden.

#### **TEACHING METHODS**

Learning by doing: a mix of theoretical lessons, field trips and practical workshops.



**Grading** Total number of ECTS assigned for the successful completion of the course: 3 ECTS

Grading Weights		Grading Scale
1. Attendance	30 %	Excellent = 90-100
2. Participation and Creative Process	40 %	Good = 80-89
3. Final work / Final presentation	30 %	Average = 70-79
		Below Average = 60-69
TOTAL	100 %	Poor = 59 or below

	<b>Excellent</b> 90 -100%	<b>Good</b> 80 – 89%	<b>Average</b> 70 – 79%	Below Average 60 – 69%	Poor Below 60%
Attendance (30%)	On time, perfect attendance	Seldom late: attended between 95% and 90 % of the course	Occasionally late: attended between 90 % and 85 % of the course	Occasionally late: attended between 85% and 80% of the course	Frequently late, attended less than 80% of the course: FAILED
Participation and Creative Process (40 %)	Demonstrates strong understanding of the topic & thorough, creative research	Shows good grasp of the topic & good research	Exhibits average comprehension of the topic & average research	Shows some awareness of the topic & below average awareness of research	Has shallow insight into the topic & poor grasp of research
Original Project (Final work/ Final presentation) (30%)	Exhibits exceptional analysis of concepts & production of original proposal	Exhibits exceptional analysis of concepts & production of original proposal	Exhibits average analysis of concepts & production of original proposal	Exhibits below average analysis of concepts & production of original proposal	Exhibits poor analysis of concepts & production of original proposal



### **Course Schedule\***

### **1ST WEEK**

Day	Time	Professor	h	Lesson-subject
				Welcome and Registration.
Day 1 Tuesday				The basic principles of creating a game. Unity3D: what is an IDE and a game engine, the basics of the interface, create your first script and your first scene.
Day 2 Wednesday				Advanced camera topics. Using Cinemachine to control a game camera. Lights and rendering pipelines: how to make your world shine. You will also learn how to post-process your scene.
Day 3 Thursday				The basic principles of Visual Scripting, starting from "Hello World" to create references, access properties of GameObjects and organize your game scripts.
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Day 4 Friday				Animations and TimeLine: how Unity handles animations, how to create your own animations right inside Unity and how the Mechanim system works.

### 2<sup>ND</sup> WEEK

	Day	Time	Professor	h	Lesson-subject	
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Day 5 Monday				Project development	
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Day 6 Tuesday				Project development	
Day 7 Wednesday				Project development	
Day 8 Thursday				Project development	
Day 9 Friday				Presentation prep.	
				Final Presentation	

\* Schedules may be subjected to changes.

The school reserves the right to:

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- amend or cancel courses, change course location or substitute course leaders, professors, guests, visits location. make any changes that in our absolute discretion we consider necessary or appropriate for reasons of operational efficiency or due to • any other circumstances that are beyond our control