



Department of  
Biomedical  
Engineering



**XRPANDA**

 CANADA

| WORKSHOP 2

# Unity Fundamentals

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*Master the Unity Editor, Physics, Interaction Logic, and UI/UX Basics for XR game development.*

January 22-23, 2025 | 7:00 - 8:00 PM





# Agenda

## 01. Unity Editor Fundamentals

Navigate the workbench, understand the interface layout, and master 3D space controls for scene construction.

## 02. Components & GameObjects

Learn the component-based workflow, transform properties, and the parent-child hierarchy system.

## 03. Physics & Interaction Basics

Understand Rigidbodies, colliders, gravity, and how to create grabbable objects with specific component configurations.

# Snapshot of Workshop 1



Virtual Reality (VR)



Augmented Reality (AR)



Mixed Reality (MR)



Extended Reality (XR)

## How VR is Changing the World

01 Concept & Ideation

04 Testing & QA

02 Pre-Production

05 Development & Maintenance

03 Production



# Fundamentals

- Scene View (The Stage)
- Game View (The Lens)
- Hierarchy (The Roster)
- Inspector (The Details)
- Project Window (The Inventory)
- Transform Basics



Pan



Orbit



Zoom



Focus



# Components and GameObjects Basics



- Component-based workflow in Unity

- Introduction to Prefabs (concept level)

- Common Components: Transform, Mesh Renderer, Collider

- Adding, removing, enabling, and disabling components

# Importing and Using 3D Assets

01

Importing 3D models into Unity

02

Supported formats overview

03

Placing assets into the scene

04

Scale and orientation adjustments

05

Applying materials

06

Common beginner mistakes



# Preparing 3D Assets for Unity (Blender & Online Resources)

01

Supported File Formats

02

Correct Scale &amp; Units

03

Proper Textures &amp; Materials

04

Clean Mesh &amp; Topology

05

Naming &amp; Organization



# Summary & What's Next

Ready to bring your ideas to life in Unity? See you tomorrow at 7:00 PM



## Workshop 1: Greyboxing & Asset Sourcing

You've mastered the basics of spatial design and layout



## Workshop 2: Modelling, Animation, XR Integration

Creating custom 3D models and integrating advanced XR features



## Workshop 3: Physics, Interactions, Final Build

Finally, you'll add physics, interactivity, and polish your completed VR experience

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"This is just the beginning — the next reality starts with you."





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**Thank you & Wrap-up**

We'll take your questions !

