

In 3D Game Development, students learn the fundamentals of Coding in C# and game development skills by using Unity®, an industry-standard tool. Students will design their own custom video game just like the pros.

This is a project-based course where students take on the role of creator. In addition to technical skills, students develop the creative, critical thinking, and problem-solving skills necessary to build amazing projects from start to finish. Throughout the course, students work with industry-standard tools used by professionals. If they need any help along the way with their coursework or projects, students can reach out to experts for support by e-mail, chat, or phone.

By the end of this course, students will have built an original, professional-grade project and developed the knowledge, skills, and confidence to become creators on their own, in further study, or professionally.

Course Materials

All required materials are included with this course.

Length: One semester

UNIT 1: WELCOME TO 3D GAME DEVELOPMENT

- Lesson 1: Choose Your Character
- Lesson 2: Player Materials
- Lesson 3: Wrap Up

UNIT 2: WORLD DESIGN

- Lesson 1: Ground and Sky
- Lesson 2: Model Multiplication
- Lesson 3: Fast Grass
- Lesson 4: Wrap Up

UNIT 3: COIN COLLECTOR

- Lesson 1: Variable Coins
- Lesson 2: Conditional Cash
- Lesson 3: Wrap Up

UNIT 4: A REAL CHARACTER

- Lesson 1: Method of Dialog
- Lesson 2: True Power-Up
- Lesson 3: If-Else Intelligence
- Lesson 4: Wrap Up

UNIT 5: ENEMY TERRITORY

- Lesson 1: New View of Area Two
- Lesson 2: Enemies Collide
- Lesson 3: Range Attack
- Lesson 4: Wrap Up

UNIT 6: LIGHT AND PARTICLES

- Lesson 1: Particular Particles

- Lesson 2: Lighting the Way
- Lesson 3: Wrap Up

UNIT 7: QUEST FOR POWER

- Lesson 1: Quest: Complete
- Lesson 2: Activate Power-Up
- Lesson 3: A Cinematic Cutscene
- Lesson 4: Wrap Up

UNIT 8: PLATFORMING PLAYGROUND

- Lesson 1: Wide Open World
- Lesson 2: Hazardous Materials
- Lesson 3: Prefab Materials
- Lesson 4: Wrap Up

UNIT 9: THE FINAL ASCENT

- Lesson 1: Moving Platforms
- Lesson 2: Prepare for Launch
- Lesson 3: Wrap Up

UNIT 10: ENEMY WAVES

- Lesson 1: Wave to the Loop
- Lesson 2: Variable Difficulty
- Lesson 3: Ending Sequence
- Lesson 4: Wrap Up

UNIT 11: TITLE AND SOUNDTRACK

- Lesson 1: Listen to the Music
- Lesson 2: Name of the Game
- Lesson 3: Wrap Up

UNIT 12: GAME OVER

- Lesson 1: Standards of Excellence
- Lesson 2: Upload and Build

UNIT 13: ADVANCED TOPICS

- Lesson 1: Making a Scene Two
- Lesson 2: Add Your Models to Unity
- Lesson 3: Customize a Character