

**CENTER FOR PROFESSIONAL DEVELOPMENT****GAME ART CERTIFICATE**

360 Hours/9 Months/Instructor-Facilitated  
Course Code: **CPD173**

**OVERVIEW**

Ready to turn your passion for video games into a rewarding career? The Sessions Game Art Certificates are cutting-edge game art and design school programs that are flexible to your schedule and learning needs. Each class is exciting, relevant, and challenging—and developed with projects geared to game design processes used by leading studios today. Gear up for a career in video games with a professional certificate in animation, 3D modeling, and digital art for gaming.

Course topics in the Professional Certificate program include 2D game art in Adobe Photoshop, game textures and UV mapping, 3D modeling and lighting in Autodesk Maya, and 3D character animation. In the Advanced Certificate, you can add concentrations to your program that increase the depth and breadth of your game art and game development skills. Learn to write game concept documents, build character riggings in Maya, and add to your game artist portfolio.

**OBJECTIVES**

The Game Art Professional Certificate program prepares you for a career you'll love in the video game design industry. You'll learn the cutting-edge software and visual arts practices that are essential for anyone turning a love of video games into a career.

The Game Art Professional Certificate program provides students with a foundation in 3D modeling, imaging, and animation for video games. Core courses explore the challenges of modeling, texturing, and animating 3D characters and environments using Autodesk Maya and Adobe Photoshop. At the end of the program, you'll have built a portfolio of imaging, modeling, and animation work that showcases your professional skill set.

The goal of the Game Art Certificate program is to prepare you for a professional career as a video game artist. In the program, you will develop the technical, creative/visual, and communications skills for entry-level professional work. You will also begin to develop a portfolio of individual creative work you can present to potential employers.

- Game Development
  - You will develop an understanding of the components of the game development industry and the way in which games are designed. You will be able to discuss the roles played by different game industry professionals and teams in the development of a game.
- 2D Game Art
  - You will learn how to use Photoshop for a range of game art projects including coloring concept art, textures and texture maps, painting environments, and texturing

characters. You'll show the ability to apply the fundamentals of art, color, and composition to your work as well as test your Photoshop art in Maya.

- 3D Modeling
  - You will be able to construct 3D models in Autodesk Maya, creating and editing primitives by moving, rotating, scaling, and grouping them. You will know how to manipulate objects by selecting components, and rotating, scaling, and transforming them and using Boolean objects to combine or extrude shapes.
- Tiling Textures
  - You will be able to develop tiling textures for video games from reference photos or other source material. You can test and apply textures to 3D objects and environments and apply tiling textures to a range of maps commonly used in video games.
- Lighting Design
  - Your work shows the ability to apply basic three-point lighting techniques in Maya and use shadows and highlights to affect emotion. You can apply ambient, directional, spot, and point lights in Maya and modify their controls for position, intensity, and color, as well as develop and apply shaders that create realistically lit surfaces with color, gloss, reflection, and other characteristics.
- Character Animation
  - Your work will show your ability to apply basic principles of animation with Maya such as squash and stretch, anticipation, and follow through to basic characters and objects. You will be able to develop a believable character walk cycle and use posing within the cycle to create mood and personality.

## **OUTLINE**

### Level 1

Intro to Game Development  
Photoshop for Game Artists  
Maya Basics

### Level 2

Tiling Textures  
Game Lighting and Color  
Character Animation

This program consists of six required modules. Module descriptions are as follows:

#### *Intro to Game Development*

- This course, developed by lead game designer Steve Kalning, gives you a head start in your game art or design career. What's it like to work in game development? In this 6-lesson course, you'll find out, gaining insight into every aspect of how today's video games are created. You'll learn about the business model, the technology platform, the production process, and the genres that define the medium, developing an understanding of the people and processes that drive development.
- A major goal of the course is to help you understand the different roles in game art and design departments. What's it like to be lead artist, a character animator, a level designer, or a mechanical designer? You'll explore the inner workings of the game development team, finding out how art, programming, audio, design, and QA work together to create a killing product.
- To prepare you for a professional game development environment, papers, tests, and projects will challenge you to develop the analytical and written skills you'll need for communicating

with other game industry pros. A secondary focus is on helping you define your influences, interests, and ambitions as a game artist or designer.

### *Photoshop for Game Artists*

- Game artists rely on Adobe Photoshop for concept art, textures, and lots more. Learn how to maximize your Photoshop skills to create quality game art pieces.
- In this 6-lesson hands-on course, you'll learn tricks of the trade for coloring concept art, creating tiling textures, painting environments, working with texture maps, and even texturing characters. A wide range of Photoshop tools and techniques will be explored, such as vector shapes, custom brushes, time-saving actions, and layer masks. You'll also learn how to apply fundamentals of art, color, and composition to your work. As you work, you'll test your Photoshop art in Maya, an industry-standard 3D modeling program (prior Maya experience not required).
- Professional game artist Todd Gantzler will guide you through the essentials of game art and introduce you to characters, weapons, and environments that you can manipulate using Photoshop. This course is for anyone interested in a career in game art and extending their Photoshop knowledge.

### *Maya Basics*

- If you're looking to create video game artwork, look no farther than Autodesk Maya. Maya combines powerful tools for the major areas in 3D content creation: modeling, animation, texturing, and rendering. Many of today's top video games are created in Maya: from characters, to models, levels, and more.
- This 6-lesson course, developed by Maya maestro Nathaniel Stein, helps you unlock the mysteries of this challenging program. You'll develop a thorough understanding of the Maya toolset, learning how to create, edit, and refine polygon models, add textures and apply UV maps, develop basic animations, and export your artwork into a game engine. Class projects include working with primitives, complex inorganic models, character modeling, texturing, animation studies, and exporting a scene.
- If you've been waiting to learn Maya to get into developing art for video games—or any other type of 3D project—this course will put you through your paces and launch you into the creative world of 3D at hyperspeed.

### *Tiling Textures*

- Tiling textures, the design of repeated textures for 3D environments, is an essential part of any game artist's job. So essential is the task, any game artist who is new on the block is likely to spend the majority of his or her time creating tiling textures.
- In this hands-on 6-lesson class, you'll focus exclusively on developing tiling textures for 3D environments. You'll learn how to gather reference photos and turn source imagery into texture tiles and texture sets. You'll explore how to create tiles that are the appropriate format and resolution for game engines, removing distracting detail and testing your work as you go. You'll study how to address the specific requirements of organic and geometric textures, perspective, and lighting. Finally, you'll learn about the different maps which game developers use to deploy tiling textures.
- Completing this class will give you an understanding of the various game texture scenarios tackled in a professional environment. Critique and feedback from an expert instructor will help you add a series of tiling textures to your game art skillset and portfolio.

### *Game Lighting and Color*

- Lightness and darkness are constantly battling for their place in the world. Who'll win? As a lighting artist, you decide. A mastery of lighting and color is the mark of the true game art

- professional. Lighting can set the mood in a dungeon, help a player notice a hidden power-up, make a character look menacing, and more.
- In this six lesson hands-on course, you'll learn the lighting standards and techniques that shape today's game environments. You'll master the basic vocabulary, tools, and controls used to produce lighting effects in 2D and 3D imaging programs. Then you'll tackle the advanced shading and texturing techniques that can bring realism or depth to surfaces.
  - As you learn the applications of fundamental lighting and color technology in Photoshop and Maya, you will be focused on the artistic, and technical aspects of game lighting: how color and lighting shapes the emotion of a character or scene, how it affects the player's experience, and how lighting requires tradeoffs in the design process.
  - Six challenging exercises will test your lighting technology skills and your creative approach. Critique and feedback from an expert instructor will help you add develop well-executed game art pieces for your portfolio or reel.

### *Character Animation*

- Ready to put your creativity in motion? Learn how to apply the classic principles of character animation to 3D models using Autodesk Maya. In six hands-on lessons, character animation phenom Cristin McKee guides you through 14 principles of animation ranging from squash and stretch and anticipated movement to the expression of personality and thought.
- Using Maya's high-level animation tools, you'll gain insight into the professional animator's approach, learning to work with hierarchical characters, create effective poses, properly time your shots, develop advanced walk cycles, and even make your characters think.
- Whether you're interested in character animation for game cutscenes, cinematics, in-game animations, or other applications, this course will give you all the tools you need to get started. Each challenging lesson and exercise addresses professional-level techniques that will put you on the fast track to producing high-quality 3D character animations.

### **COMPUTER REQUIREMENTS**

- A Windows-based or Macintosh computer that meets manufacturers' requirements for required software in the program.
- Broadband access to the Internet
- Autodesk Maya. Read [Autodesk's system requirements for Maya](#).
- Adobe Photoshop and basic experience in Photoshop. If needed, the [Photoshop Basics](#) course can help you meet this requirement.
- Access to at least one current game console (such as PlayStation 3, Xbox 360, or Wii)
- Program concentrations and course substitutions may involve additional requirements.

**\*SOFTWARE IS NOT INCLUDED IN THE COST OF THIS PROGRAM.\***

### **INSTRUCTOR BIO**

Students will receive critique and feedback from a faculty of art and design professionals.

**Todd Gantzler** is a game artist, educator, and writer. Todd has worked as a 3D artist on such games such as Gex 3D, Cyberia, and Akuji the Heartless and specialized in game design work and character animation. Todd has served as Program Leader for game development degree programs at the Media Design School in New Zealand and at the University of Salford in England. He has been designing

and teaching game art and design classes since 2000. Todd's first book Game Development Essentials: Video Game Art was published by Thomson Delmar Learning in July 2004. Todd moved into games from work in graphics and animation for TV and film; his film credits include The Pagemaster (1994). **Jennifer Gutterman** is a 3D artist and educator with nearly 20 years of freelance experience, most recently as the Lead 3D Artist and Concept Designer for a small game company specializing in mobile game projects. With over seven years of teaching experience, Jennifer brings both traditional and cutting edge technological experience to the learning experience. Jennifer received a double Bachelors of Fine Arts from Syracuse University in Computer Graphics & Painting and a Masters of Fine Arts in Visual FX, specializing in 3D Modeling & Concept Design from the Academy of Art University in San Francisco, CA. Between and during these degrees, Jennifer has worked in print, web design, scenic design, game development and a variety of other fine art ventures all around the United States.

**Nate Stein** is a modeling supervisor and CG artist at Anzovin Studio. He has worked on animation for games such as Sid Meier's Railroads and Halo 2, as well as a variety of TV shows and movies. Nathaniel attended the University of Massachusetts at Amherst, where he also taught courses in Animation and Modeling after his graduation. Nathaniel co-authored the book Visual Quickstart for Maya 7.0, and is currently working on a new book. Nathaniel received his BA in Computer Animation from the University of Massachusetts at Amherst.