# Two-Year Accelerated MASTER OF FINE ARTS CAME DESIGN

# LOCATION

# LOS ANGELES, CALIFORNIA

Location is subject to change. For start dates and tuition, please visit nyfa.edu



# MFA Game Design

# **GAME DESIGN**

has rapidly evolved over the past several decades from a popular trend to become one of the fastest growing sectors in the entertainment industry. As games become increasingly widespread in popular culture, learning the technical and creative skills required to bring a video game to life opens up a wide range of opportunities for the aspiring game designer.

Designing video games is a unique and challenging craft that requires both a strong sense of storytelling and the advanced technical skill sets required to construct a functional and enjoyable video game. While no prior knowledge is required to enroll in the Academy's Game Design program, students should possess a genuine passion for playing games, storytelling, and technology, which will prove invaluable in developing original video games.

The Master of Fine Arts (MFA) Game Design program is a two-year, foursemester graduate program that presents aspiring game designers with the opportunity and the tools to develop original video games, guiding them from an initial idea all the way through to coding and developing that idea into a functional and engaging game that can be played on a variety of devices. Students learn to develop games for a plethora of different platforms, ranging from console games to online modules and mobile devices.

In addition to providing a solid base of specified upper-level knowledge, the educational objectives of the MFA Game Design program are to teach students the art and craft of game design and storytelling for an interactive medium, and how to be a productive and sought-after member of the video game industry through a strict regimen consisting of lectures, seminars, and total immersion workshops.

At the core of NYFA's MFA Game Design program is the Game Studio course, which is repeated each semester. Designed to simulate a professional game studio, students lead their own game studio along with 1-4 classmates. Student studios build a functioning digital game in one semester with mentorships and hands-on coding from a professional game programmer or instructor.



### CHRIS SWAIN Chair of Game Design Department

An industry leader for over twenty years, Swain co-founded the Electronic Arts Game Innovation Lab at USC. He has led over twenty award-

winning games and products for companies that include Microsoft, Disney, Sony, Acclaim, BBC, Activision, and many more. He is an indemand speaker and writer on the game industry and innovation. The inclusion of a professional programmer on student teams is an element that is particularly unique to New York Film Academy as the programmer codes as part of the student team—allowing them to focus on the critical storytelling and practical elements of their game—while also educating team members on how to code and manage a project using Agile software development.

Through employing the industry standard Agile software development method in the program's curriculum, students learn how to develop software with the assistance of collaboration tools such as JIRA and Confluence. The Game Studio course helps students to gain the skills to efficiently produce software on a schedule and budget, actively preparing students to overcome the challenges they will face in a professional environment.

Alongside learning coding and project management, game students are exposed to art direction and 3D animation courses designed to equip them to later work with talented artists and animators in the industry.

Furthermore, students enrolling in the Academy's MFA Game Design program will immerse themselves in the Academy's original Playcentric Design methodology, which is the most effective way to teach the complex craft of game design. As part of the Playcentric methodology, students will accomplish the following three steps.

- 1. Understand Fundamental Theory.
- 2. Learn Core Development Process.
- 3. Practice, Practice, Practice.

In addition to learning the technical elements of game design, an equal emphasis is placed on the importance of Story and Narrative. Students learn to engage audiences through storytelling in their games with a strong emphasis placed on frameworks for effective narrative in interactive form.

Please Note: curriculum and projects are subject to change and may vary depending on location. Students should consult the most recently published campus catalog for the most up to date course information.

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Furthermore, internships play an important role in the program as students are encouraged to complete at least one industry internship as part of their degree. NYFA provides assistance and industry relations to students seeking internships.

Finally, students graduate from the MFA Game Design program with a portfolio of Game Studio games alongside smaller prototypes, game deconstructions, business analyses, pitches, and stories. These portfolio pieces are crafted to provide graduates with the best foundation for breaking into the game industry. In addition, NYFA's faculty of professional and award-winning game designers will teach students the best practices for posting their portfolio online and getting attention with it in the industry.

The MFA Game Design program is offered exclusively at the Academy's Los Angeles campus in a city that is a hotbed for game design companies. **STUDENTS ALSO HAVE THE OPTION OF COMPLETING A ONE-YEAR GAME DESIGN CONSERVATORY PROGRAM AT NYFA'S NEW YORK CITY CAMPUS AND APPLYING THEIR COURSEWORK TOWARDS ADVANCED STANDING IN THE MFA PROGRAM.** 

# WHAT YOU WILL LEARN

Upon completing the MFA Game Design degree students will demonstrate the following skills:

- Deliver digital games using industry standard tools/methods.
- Prototyping, playtesting, iteration, presentation, and collaboration across a range of game types.
- Code games hands on using Unity and C# and possibly other programming environments.
- Master the ability to work effectively in a high pressure creative environment.

# WHAT YOU WILL ACHIEVE

The MFA Game Design Program requires successful completion of the following (partial list):

#### SEMESTER ONE AND TWO

- 2 collaboratively created digital games posted online.
- 3-D Art Portfolio.
- Graphic Design Portfolio.
- Satisfactory participation in Playcentric Design, Game Coding in Unity and C#, and Narrative Design Workshop.

#### SEMESTER THREE AND FOUR

- · Delivery of a Collaborative Thesis project.
- 2 collaboratively created digital games posted online.
- Sound Design Portfolio.
- · Satisfactory participation in Marketing Video Games course.
- · Personal Digital Portfolio posted online.



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# **COURSE DESCRIPTIONS**

# **YEAR ONE OVERVIEW**

During the first semester, students are introduced to the concept of game design by understanding the evolution of games and once a foundation in narrative theory is established, students are then introduced to the tools, theory, and craft of storytelling in an interactive medium. In the second semester, students create their first original video game concept.

## SEMESTER ONE

#### NARRATIVE DESIGN WORKSHOP

This course examines the critical elements that make strong story concepts and how they can be shaped to create the foundations of great games. Students will work on design, narrative, game play, physical environment (world, gameplay spaces), and other key elements. Guest speakers will include veteran game designers and writers.

#### **2D GAME DESIGN**

This is the first in a series of four handson development courses wherein students collaboratively deliver a working game over the course of one semester.

The course uses the beginning technology of 2D – meaning all action takes place on a flat plane with only an X and Y axis. Examples of 2D games include: *Super Mario Brothers*, *Asteroids*, *Joust*, *Space Invaders*, *Braid*, and others.

Students conceive and build a 2D Game of their own design. Each student gets the experience of running her own game studio in collaboration with classmates. Industry standards such as Agile, Scrum, Confluence and JIRA expose students to state of the art production methods and enable teams to deliver software efficiently.

In all courses in this sequence students are supported by a technical instructor/mentor who assists with programming as an active member of their team.

Students take increasingly advanced variations of this course in this sequence so acquire more sophisticated skills each successive semester. At the end of the degree they will have a portfolio of working game projects posted online.

#### GAME CODING WITH UNITY AND C#, I

The course accommodates students of all levels of existing experience with programming. It is taught by professional game programmers who organize students into Beginner, Intermediate, and Advanced groups based on experience level. Individualized instruction is given to each student to ensure that he/she finishes with hands-on ability as a programmer. The development platform used is Unity and C#. Unity allows you to build your game once and deploy at a click across all major console, mobile, and desktop platforms. Each student will complete the course with a Github portfolio of coding modules appropriate to their experience level.

#### GAME STUDIO I

This is a companion to the 2-D Game Design class. It is the first in series of four hands-on studio companion courses.

Students work in teams to build their working digital game and receive individualized tutelage and direct coding support from their instructor. Students learn that they can produce working software – even with beginner skills in a short time. They sharpen their skills by practicing this process multiple times throughout the degree program.

#### PLAYCENTRIC DESIGN

This course provides a foundation of knowledge for understanding games as playable systems. Students learn the language of Playcentric Design and practice the craft of prototyping, playtesting, and iteration in an environment independent of computers. This is to provide the student hard skills that can be used throughout a career in games—independent of changing technologies. At the end of the course each student will have a portfolio of paper game prototypes.

#### **INTRODUCTION TO 3D ART**

This course introduces students to Autodesk's Maya Animation, Visual Effects, and Compositing software, a robust application used throughout the video game industry for the creation of visual assets. Students learn how to optimize the Maya interface for enhanced productivity. They are introduced to polygon tools and taught polygonal modeling in a hands-on environment. Students will also learn the basics of UV mapping, nurbs modeling, texturing, and three-point lighting using D-map and raytrace shadows.

## SEMESTER TWO

#### SYSTEMS LITERACY

This course builds upon the foundations established in the Playcentric Design course, and focuses on advanced study of system design and play mechanics. The course is workshop-focused, meaning a substantial portion of time is spent actively engaged in the paper prototyping process. Readings and lectures supplement discussions as students explore more sophisticated facets of the playable systems and user experience design. Creating system literacy is the primary goal, and everything else students do supports that aim. Students will leave the course with multiple portfolio-ready game prototypes.

#### **3D GAME DESIGN**

This is the second in the series courses wherein students collaboratively deliver a working game over the course of one semester.

The course uses the intermediate technology of 3D – meaning action takes place in a three dimensional space and can present on the X, Y, and Z axes. Examples of 3D games include: *Battlezone*, *Deus Ex*, *The Sims*, *Grand Theft Auto V*, *Minecraft*, and others.

Students conceive and build a 3D Game of their own design (single player or multiplayer). See details about this course sequence under 2-D Game Design on page 86.



#### **PUBLISHING VIDEO GAMES**

This course provides the student with an understanding of the business of video games with a special focus on game publishing, deal structures, and product lifecycle. Students learn to see the world through the publisher's eyes and in the process gain insight in how to plan, budget, pitch, launch, and monetize games. Students are exposed to these topics via lectures, exercises, and assignments. Students leave the course with a practical and state-of-the-art of the game business model including perspective on mobile games, console games, browser games, free to play games, and other business paradigms.

#### GAME CODING WITH UNITY AND C#, II

This course provides students of Intermediate and Advanced ability extended training with Unity and C#. Like, its precursor course, it is taught by professional game programmers who organize students into groups based on experience level. Individualized instruction and self-paced tutorials are given to each student to ensure that her hands-on skills with coding are improved and her Github portfolio site has additional modules and prototypes. Students will create at least one project that is deployed to three platforms e.g. console, mobile, and web browser.

#### GAME STUDIO II

This is a companion to the 3-D Game Design class. It is the second in the series of hands-on studio companion courses.

See details about this course sequence under Game Studio I on page 86.

#### ART DIRECTION FOR GAME DEVELOPERS

This course examines the role of visual design in building games. The course exposes students to the craft of the Art Director via a combination of theory and practice. Students learn basic skill set presentation (art history, color theory, composition, typography, basic digital media skills). Students learn to think about projects in terms of the constraints of technology, client needs, and enduser experience. The course covers basic UX/ UI concepts. Students learn formal ideation and problem solving for visual design while mastering the look and feel of an experience.

# YEAR TWO OVERVIEW

In the third semester, students learn about Multiplayer Game design and get exposure to Level Design, Marketing, and the History of Video Games.

In semester four students create their fourth working game concept—this time as a collaborative thesis project. At the same time, they learn about Ethics of Video Games, Sound Design, and complete an advanced analysis course called The Great Video Games.

## SEMESTER THREE

#### **MOBILE GAME DESIGN**

This is the third in the series courses wherein students collaboratively deliver a working game over the course of one semester.

The course uses the intermediate technology of Mobile devices – meaning the game is played on a handheld device such as an iPhone, Android phone, and PS Vita. Students can build 2D or 3D games. Examples of mobile games include: Angry Birds, Clash of Clans, Doodle Jump, and others.

Students conceive and build a Mobile Game of their own design. See details about this course sequence under 2-D Game Design on page 86.

#### **GAME STUDIO III**

This is a companion to the 3-D Game Design class. It is the third in the series of hands-on studio companion courses.

See details about this course sequence under Game Studio I on page 86.

#### LEVEL DESIGN

In this class students work on paper and with level editor tools from commercial games to create high quality play experiences within existing games. Students learn and practice scripting to optimize the play experience including pacing, save points, ratio of obstacles versus power ups, and other game play concepts.

#### **MARKETING VIDEO GAMES**

This class builds on the foundation of the course Publishing Video Games with a focus on marketing. Students learn how to market their NYFA game titles—whether 2D, 3D, multiplayer, mobile, or other. Students learn the business side of marketing including how to make a marketing plan, calculate return on investment, develop data-driven reporting, and conduct public relations. Students learn about guerilla marketing techniques suitable to independent studios with no money. And they learn about the marketing techniques by top publishers for AAA titles.

#### THE BUSINESS OF VIDEO GAMES

The course educates the student about professional networking, portfolio presentation, roles in industry, career path from entry level to creative leader or business leader, and other hands-on knowledge pertinent to a professional game developer.

#### **HISTORY OF VIDEO GAMES**

This course focuses on the rich history of digital games starting with MIT's *Spacewar* from 1962 and showing how and why the medium transformed through the 1970s when Pong and Atari first had a mass cultural impact—all the way through each successive era to today's world of connected consoles, smart phones, and Google Glass.

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### **SEMESTER FOUR**

#### THE GREAT VIDEO GAMES

Students play, study, and debate the video game canon. They gain understanding of the Formal, Dramatic, and Dynamic nuances of seminal works. Students compare and contrast pillars of the field across era-defining games such as *MULE*, *Tetris*, *Civilization*, *Super Mario 64*, *Zelda*, *The Sims*, *Bomberman*, *Braid*, *Flow*, *Ultima Online*, and *BioShock*.

#### **COLLABORATIVE THESIS**

This is the fourth in the series courses wherein students collaboratively deliver a working game over the course of one semester.

The student has the advanced responsibility of choosing her own technology (in collaboration with teammates) for her MFA thesis project.

Students conceive and build a thesis-worthy digital game of their own design. This project is expected to be the student's most ambitious and polished work to date and a culmination of four semesters of practice with the craft of game development.

See details about this course sequence under 2-D Game Design on page 86.

#### GAME STUDIO IV

SONY

This is a companion to the Collaborative Thesis class. It is the fourth in the series of hands-on studio companion courses.

See details about this course sequence under Game Studio I on page 86.

#### **MASTER'S THESIS PRODUCTION**

This course provides the student with thesis mentorship, support, and guidance through their final MFA semester. The course helps each student create a powerful, well-reasoned thesis argument to accompany their collaborative digital thesis project.

#### ADVANCED LEVEL DESIGN

This course builds on the knowledge from the previous Level Design course and delves deeper into core concepts. Students work with level editors from the games *Minecraft, Little Big Planet,* and *Warcraft III* to make sophisticated play experiences. Students are required to make YouTube videos of gameplay as potential portfolio pieces.

#### **CINEMA STUDIES**

As a descendant of cinema, video games are informed by the story-telling techniques and development of the motion picture art form. Game Designers should be conversant with the evolution of this medium from its inception. Students will be given a thorough creative, technological and industrial view of the filmmaking art. This knowledge will be invaluable to their game design work.

#### ETHICS OF VIDEO GAMES

Ethics refers to standards of right and wrong in society. Students study and debate ethics in play experiences and how play is a way of learning about the real world. Poignant case studies are presented from games such as *September 12* (an anti-terrorism simulator), *Grand Theft Auto* (an amoral, open world), *Populous* (a god game), *BioShock* (a game with a morality engine), and other games. Students learn about meta-game behavioral issues such as cheating, violence, and the four types of players found in online worlds—Explorers, Achievers, Socializers, and Destroyers.

> Klaus is 2D puzzle platformer created by NYFA student Victor Velasco. Winner of the 2012 Square Enix Excellence Prize and showcased at the PS Dev Summit 2014. Victor and NYFA classmates Aleksandar Cuk and Kshitij Bal are preparing Klaus for launch on the PS4 and PSVita.