



CINEMA FACTORY
ACADEMY

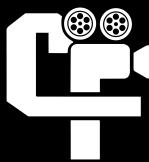


UNREAL
ENGINE

ADVANCED VIRTUAL PRODUCTION

1 YEAR DIPLOMA
COURSE CATALOG





CINEMA FACTORY ACADEMY

Advanced Virtual Production – 1 Year Diploma

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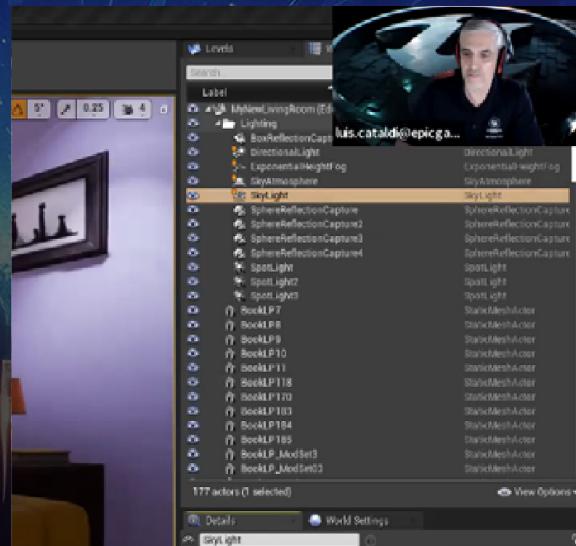
Course Overview

Detailed Course Breakdown



Exclusive Course Design

Our course is designed to provide future filmmakers with the skills and knowledge to leverage Unreal Engine's powerful real-time rendering and virtual production capabilities. This course will cover the fundamentals of Unreal Engine, its applications in filmmaking, and advanced techniques to create immersive cinematic experiences. Students will gain hands-on experience through practical projects and real-world scenarios, preparing them for the modern demands of the film industry.



Extensive Learning Formats

Academic Learning

Led by an authorized Unreal Engine instructor, this course is designed to offer an in-depth and hands-on learning experience. Students will receive professional guidance from an expert with a comprehensive understanding of Unreal Engine's real-time rendering and virtual production capabilities.

This course emphasizes practical application, industry-standard practices, and personalized mentorship to ensure students are well-prepared for modern filmmaking challenges.

Exclusive Master Classes

At our Cinema Factory Academy, students will have the exceptional opportunity to learn from Hollywood award-winning instructors who specialize in virtual production. They will conduct live online training sessions on a regular basis, offering extensive master classes. Their expertise and insights will provide students with advanced knowledge and practical skills essential for mastering virtual production.

Expertise Behind the Course Design

Real-World Experience:

Our instructors bring years of hands-on experience from working on major Hollywood films, award-winning television series, and groundbreaking virtual production projects.

Current Engagements:

They are actively involved in high-profile projects, ensuring they stay at the forefront of industry developments and emerging technologies.

Specialists in Their Fields

Technical Proficiency:

Our course designers include specialists in various domains of VFX, including virtual production, real-time rendering, character animation, and simulation effects.

Innovative Techniques:

They employ the latest techniques and tools, ensuring students learn the most current and effective methods in the industry.

Continuous Updates | Adapting to Trends:

The curriculum is continuously updated to reflect the latest trends, tools, and methodologies in VFX and virtual production.

Feedback Integration:

We actively seek feedback from students and industry professionals to refine and enhance our courses.

By enrolling in our courses, students benefit from the collective knowledge and expertise of industry leaders who are shaping the future of visual effects and virtual production. This real-world perspective ensures that our training programs are not only theoretically robust but also practically applicable, preparing students to excel in their careers.

Expert Mentors



Aravind Naga
VFX Supervisor | Head Of The Department

Aravind Naga is a highly accomplished professional with over a decade of experience as a VFX Supervisor and Post Production Supervisor. His visual effects work on acclaimed films such as Super Deluxe, Modern Love Chennai and Title Animations for Theri and Mersal has earned him prestigious accolades, including the Best VFX award at the Osaka Tamil International Film Festival for the film "Super Deluxe."

Filmography : Super Deluxe, Demonte Colony, Modern Love Chennai, Theri, Mersal, Maara, Maragadha Naanayam, Thegidi, Kuthiraivaal ,Kalyana Samayal Saadham, Kallachirippu, Kaiyum Kalavum, and many more.



Shiv Shankar
VFX & Virtual Production Mentor

Shiv Shankar stands out as a talented Senior VFX & Unreal Engine artist, specializing in Virtual Production with abundance hands-on experience in the visual effects industry. His proficiency in ICVFX has resulted in impressive outcomes across a range of notable projects.

His contribution at Annapurna's ANR Virtual Production Studios played a key role in various creative projects and refined his technical skills.

Shiv's portfolio exemplifies his ability to deliver compelling and high-quality visual effects.

Filmography :

The Ghost, Yashoda, Thandel, Miss Shetty Mr. Polishetty, Eagle, and Naa Saami Ranga and more.

Virtual Production Projects :

Rado, Chennai's Amrita, Vara Mahalakshmi Silks, Robinhood, Eagle, Naa Saami Ranga, Miss Shetty, Bigg Boss Telugu



Expert Mentors



Mukesh Kannan
VFX Mentor

Mukesh is a versatile 3D animator and VFX artist with expertise in Unreal Engine. He has worked on the previz animation for the film LEO and contributed to Chittha, as well as various Chinese episodic animations and the animated movie ZAN and NOAH's Ark.

His skillset spans 3D animation, VFX, and Unreal Engine, making him a key player in both international and local projects.

Filmography: LEO, Chittha, ZAN, NOAH's Ark and many more.



Muniraj
Creative Technologist

With over 12 years of experience as a DIT and creative technologist, Muniraj has established himself as a key figure in the filmmaking industry. Known for his exceptional problem-solving skills and innovative approach, he excels in addressing on-the-spot issues during film production.

Filmography : Kaala, Marina, Super Deluxe, Mumbai Police, Vikram Vedha, Thaanaa Serndha Koottam and many more.

CINEMA FACTORY ACADEMY ADVANTAGE



NFDC
Certification



Updated AI
Integrated Modules



Film Shoots &
VFX Studio Visits



Authorised Industry
Expert Mentors



Internship
At Leading Studios



VEGAS
Membership



Hands On
Practical Approach



Master Classes
of Industry Experts



Unlimited
Stock Assets Access



Extended
Lab Access



Shoot Floor
Access



Student Discounts on
Softwares & Equipments

ADVANCED VIRTUAL PRODUCTION

Our course is meticulously crafted by a team of specialists and technicians who are not only industry experts but are also actively working on cutting-edge projects in the VFX and film industries. This ensures that our curriculum is always relevant, up-to-date, and aligned with the latest industry standards and technological advancements.

Prerequisites

To ensure that students are well-prepared for the Unreal Engine course and can fully benefit from the training, the following prerequisites are required:

Minimum Education Requirement:

Students must have completed a minimum of class 10 or equivalent. This foundational education ensures that students have the necessary academic skills and discipline to engage with the course material effectively.

Basic Foundations of Visual Effects:

Students should have a basic understanding of visual effects concepts, including:

Key Terminologies:

Familiarity with terms like compositing, rendering, animation, and simulation.

Software Basics:

Basic knowledge of VFX software such as Adobe After Effects, Blender or Nuke.

Technical Proficiency

Computer Literacy:

Proficiency in using computers and navigating software interfaces.

Basic understanding of file management, software installation, and system requirements.

Recommended Preparation:

Cinema Factory Academy's - The Foundations Of VFX | 3 Months

ADVANCED VIRTUAL PRODUCTION

Course Overview

FOUNDATIONS

- Month 1** | Overview of Unreal Engine | User Interface | Landscape & Environment Design
- Month 2** | Landscape & Environment Design - II | Materials & Asset Management
- Month 3** | Materials & Asset Management -II | Advanced Lighting & Rendering
- Month 4** | Advanced Lighting & Rendering -II | Blueprints | Camera Techniques & Sequencer
- Month 5** | Sequencer - II | Post Processing & Rendering

VIRTUAL PRODUCTION

- Month 6** | Fundamentals of Virtual Production | Real-Time Compositing & Keying
- Month 7** | Advanced Virtual Production Techniques | In-Camera VFX (ICVFX) | Project
- Month 8** | Optimization for the LED Volume | Peer reviews & iterative feedback
- Month 9** | VP - International Industry Expert Master Class | VP Project Case Studies
- Month 10** | International Virtual Production Stage Visit & Master Class
Student's Final Project Presentation & Critique by Industry Experts
- Months 11 & 12** | Internship at a Virtual Production Studio

ADVANCED VIRTUAL PRODUCTION

Detailed Course Breakdown

Month 1

Module 1: Getting Started with Unreal Engine

Week 1: Introduction to Unreal Engine

Overview of Unreal Engine

Installation and setup

User Interface - I: Basic navigation and interface customization

Week 2: User Interface - II

Advanced UI customization

Utilizing UI for complex project management

Efficient navigation techniques

Module 2: Landscape and Environment Design

Week 3: Landscape - I

Creating complex landscapes using terrain tools

Advanced landscape sculpting techniques

Using height maps and terrain layers

Week 4: Foliage - I

Advanced techniques for foliage creation and management

Using procedural foliage tools

Optimizing foliage for performance

Month 2

Week 5: Foliage and Landscape Painting - II

Advanced landscape painting techniques

Integrating foliage with landscapes

Performance optimization for large environments

Module 3: Materials and Asset Management

Week 6: Materials - I

Introduction to advanced material creation

Using material instances and parameter collections

Optimizing materials for performance

Week 7: Materials - II

Creating complex materials using nodes

Advanced texture mapping techniques

Utilizing PBR (Physically Based Rendering) workflows



ADVANCED VIRTUAL PRODUCTION

Detailed Course Breakdown

Week 8: Materials - III

Creating dynamic materials with Blueprints
Using material functions for reusable material setups
Advanced shader techniques

Month 3

Module 1: Getting Started with Unreal Engine

Week 9: Asset & Materials Migrate - I

Best practices for migrating assets and materials between projects
Utilizing the Content Browser efficiently
Handling large-scale asset libraries

Week 10: Asset & Materials Migrate - II

Automating asset migration with Python and Blueprints
Troubleshooting common migration issues
Optimizing asset management workflows

Module 4: Advanced Lighting and Rendering

Week 11: Lighting - I

Advanced lighting techniques and setups
Using dynamic and static lighting together
Understanding lightmaps and light baking

Week 12: Lighting - II

Advanced techniques for indoor and outdoor lighting
Utilizing volumetric and emissive lighting
Performance optimization for complex lighting setups

Month 4

Week 13: Lighting - III

Advanced shadow techniques
Utilizing global illumination in real-time
Post-processing effects for lighting enhancement

ADVANCED VIRTUAL PRODUCTION

Detailed Course Breakdown

Module 5: Blueprints

Week 14: Blueprints

Introduction to advanced Blueprints
Creating reusable Blueprint components
Debugging and optimizing Blueprints

Module 6: Camera Techniques and Sequencer

Week 15: Understanding Camera Properties

Advanced camera settings and controls
Using multiple camera setups for dynamic shots
Integrating cameras with real-world data

Week 16: Sequencer - I

Introduction to advanced Sequencer techniques
Creating complex animations and sequences
Using Sequencer for cinematic storytelling

Month 5

Week 17: Sequencer - II (Mixamo)

Integrating Mixamo animations with Sequencer
Editing and refining imported animations
Creating complex character sequences

Week 18: Sequencer - III

Advanced Sequencer techniques for real-time cinematics
Utilizing Sequencer with motion capture data
Optimizing Sequencer workflows for performance

Module 7: Post Processing and Rendering

Week 19: Post Processing & Rendering

Advanced post-processing techniques
Creating high-quality renders with Unreal Engine
Optimizing rendering settings for performance and quality

ADVANCED VIRTUAL PRODUCTION

Detailed Course Breakdown

Month 6

Module 8: Fundamentals of Virtual Production

Week 20: Real-Time Rendering

Understanding real-time rendering in virtual production
Techniques for achieving photorealistic renders
Optimizing real-time rendering performance

Week 21: Virtual Camera Systems

Introduction to virtual cameras and their setups
Camera movement and control in virtual production
Advanced camera techniques for storytelling

Weeks 22-24: Real-Time Compositing and Keying

Advanced compositing techniques in real-time
Working with green screens and chroma keying
Integrating live-action footage with virtual environments

Month 7

Module 9: Advanced Virtual Production Techniques

Week 25: In-Camera VFX (ICVFX)

Setting up LED volumes for virtual production
Calibration and synchronization of LED walls
Techniques for achieving in-camera visual effects

Weeks 26-28: Project and Assessment

Planning for executing a comprehensive virtual production project
Applying advanced techniques and workflows learned throughout the course

Month 8

Week 29: Optimization for the LED Volume

Basics of optimization of the assets for the LED Volume.

Weeks 30-32 : Project Reviews

Project reviews & iterative feedbacks for the students from the mentors.

ADVANCED VIRTUAL PRODUCTION

Detailed Course Breakdown

Month 9

Weeks 33-36 : Online Virtual Production - Industry Expert Master Class

At our Cinema Factory Academy, students will have the exceptional opportunity to learn from Hollywood award-winning instructors who specialize in virtual production.

They will conduct live online training sessions on a regular basis, offering extensive master classes. Their expertise and insights will provide students with advanced knowledge and practical skills essential for mastering virtual production.

Students are also exposed to case studies of previous virtual production shoots that were held at VP Stages.

Month 10

Weeks 37-40 : International Virtual Production Stage Visit & Masterclass

Students visit an international virtual production stage with their VP Project files to get a hands on experience in at the VP Stage.

Student's Final Project Presentation on the virtual production volume and critique by industry experts

Months 11 & 12

Internship at a Virtual Production Studio

Students get to intern and learn hands on LIVE Virtual Production Projects.



**UNREAL
ENGINE**

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CINEMA FACTORY ACADEMY

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