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# VISUAL EFFECTS ARTISTS ARE IN DEMAND. NOW'S THE TIME TO PURSUE A CAREER IN THE ENTERTAINMENT INDUSTRY.

There's never been such an exciting time to create films and games! This guide is to help you get started in visual effects. You'll learn about different jobs, get career tips, hear from those now working in the industry, and a whole lot more!

A FX are everywhere in movies, TV, games and advertising... frosty breath, blood splatter, bullet hits, sparks, clouds, ocean extensions and splashes. You may not think the movie you're watching has many FX, but wait for the end credits. 19

Magdalena Bisogni, VFX Producer and Recruiter

## ABOUT CG SPECTRUM

## TRAINING THE NEXT WAVE OF PRODUCTION-READY FILM AND GAME ARTISTS

CG Spectrum is an online animation, VFX, digital art and game development school that helps get students industry ready sooner.

By offering world-class online career training and personalized mentorship from industry experts with years of experience working on blockbuster films and best-selling games, students can become well trained and prepared for a career in the entertainment industry.









#### SOME OF THE STUDIOS THAT HAVE HIRED OUR GRADS:













## THE VFX PIPELINE

# IF YOU WANT TO WORK AS A VFX ARTIST, YOU NEED TO UNDERSTAND EVERY STEP OF THE PIPELINE.

The visual effects production pipeline refers to the various stages of production required to add visual effects to a film or video game. The pipeline organizes each department so that every artist knows their role, and a production can move along within the allocated timeline.

The production pipeline differs slightly between film and game production, and roles will vary depending on studio size, but these are some of the common roles you will find.

"VFX is a team sport and strong communication skills are important."

Alan Robinson, CG Spectrum graduate, MPC, SSVFX

With the rise of virtual production and content being created in realtime, the pipeline changes.

READ MORE ABOUT
VIRTUAL PRODUCTION

### THE VFX PIPELINE

PRE-PRODUCTION



#### **STEP 1:** STORYBOARDS & ANIMATICS

The script is transformed into a storyboard and scenes are sketched out to give the screenplay its first visual iteration. Frames of action, shot types and camera angles are defined.



#### **STEP 3:** CONCEPT ART & DESIGN

One of the most important phases of preproduction. An artist or team sets the look and feel of a film by creating fully realized images that define settings, characters, props, costumes, lighting, color, etc.



#### **STEP 5:** RESEARCH & DEVELOPMENT

VFX supervisors work with directors to identify how certain shots can be accomplished while VFX artists, technical directors, modelers, animators, and compositors do research into what certain elements of the shot will look like. They then create program tools to efficiently deliver final shots.



#### **STEP 2: PRE-VIS**

The storyboard is further developed. 3D artists create low poly models and representations of scene locations, work with production to set up camera angles, and block out complex scenes.



#### **STEP 4:** LAYOUT & PRODUCTION DESIGN

Set builders communicate to directors and producers what is physically possible and what needs a digital enhancement. For VFX, it defines how digital set builds will be incorporated. Layout and production designers may use drawings, photos, and 3D renderings to finalize the sets.





Filming takes place on set—on location or in a studio (usually both).

#### **POST-PRODUCTION**



### WHERE MOST OF THE VFX HAPPENS

#### **STEP 7:** 3D MODELING & TEXTURING

One of the first groups involved in postproduction. They create what isn't practical or cost-effective to shoot on set such as props, buildings, vehicles, and weapons to fulfill the director's vision.



#### **STEP 9**: FX & SIMULATION

Simulated elements are added seamlessly to the footage. VFX artists work alongside animators to integrate effects such as destruction, fire, liquids, smoke, particle simulations, etc.



#### **STEP 11:** COMPOSITING

Compositors take all the film elements and layer them on top of each other, using elements like color correction, masking and other tricks to create the illusion that all elements naturally belong together. This can involve placing an animated character into a live action scene, overlaying destruction onto a building, or even layering a simulated tsunami over a shot of a city street.



#### **STEP 8: RIGGING & ANIMATION**

A system of controls, or digital skeleton, is built for animators by adding bones, calculating and implementing skin weights, and adding muscles to create natural movement. Animators use the custom controls of the rig to bring the character, prop, or vehicle to life as well as working with and tweaking motion capture data.



#### **STEP 10:** LIGHTING & RENDERING

3D elements are lit to match the scenes. A lighting artist or team ensures the light color, intensity, and shadows of 3D elements match up with the original footage. Each sequence of frames is then rendered.



CHECK OUT CG SPECTRUM'S VISUAL EFFECTS COURSES cgspectrum.com/visual-effects

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## JOBS IN VFX



VFX STARTING SALARY: \$50-70K USD MID-SENIOR LEVEL SALARY: \$70-140K USD **VFX SUPERVISOR SALARY: \$130K+** 

Salaries may vary depending on location

#### FX ARTIST - FILM

Creates computer generated effects elements to integrate seamlessly with live-action footage. A highly in-demand role, FX artists may be required to create fire and smoke, explosions, destruction effects, magic, particle effects, bullet hits, blood, water, oceans, and everything in between. There is no end to the variety of VFX tasks that an FX artist may be tasked with.

#### FX ARTIST - GAMES

Games artists work in teams to create effects that enhance the sequences and actions of game animation. Effects in games have stricter requirements than that of film, so artists are required to produce efficient effects setups that can be replicated over and over again while conserving data and maintaining fast FPS (frames per second) rates to ensure smooth gameplay.

( There are a myriad of disciplines that go into any production involving animation and VFX, and the list is ever growing as technology gets more advanced. 11

Bryan Bentley, award-winning VFX artist and CG Spectrum mentor

Click to learn more about each of the roles, including key responsibilities salary range, and how to get starte



**DISCOVER YOUR IDEAL VFX CAREER:** cgspectrum.com/career-pathways

#### **ROTO ARTIST**

Roto artists trace areas within live-action frames where the CGI will be inserted or interact with live images. They create silhouettes known as roto mattes within the frame to allow the scene to be layered by the compositor. This technique is known as rotoscoping and is manually drawn out frame by frame if the sequence involves camera movement.

#### COMPOSITOR

Compositors ensure that all the visual elements of a film, TV show, or advertisement are blended seamlessly on the screen. They deal with a complex combination of images including green screen sequences, special effects, visual effects, mattes, and live action coming together to complete a believable whole.

### LEAD ARTIST - FX AND COMPOSITING

An artist with enough experience and who is a proven, proactive, and reliable team member may be promoted to a lead position. They would be responsible for



#### **WATCH A VFX ARTIST IN ACTION**

Check out CG Spectrum's VFX live streams for demos, tutorials, and more from an industry expert! a sequence or team, offering technical support and help for artists. They might also create setups for other artists. Lead artists can also act as the conduit between supervisors and artists, taking notes from supervisors and delivering them to the artists and offering advice on how to address notes.

#### COMPOSITING SUPERVISOR

After gaining experience as a compositing lead, artists may qualify for compositing supervisor positions. They may oversee a compositing department at a VFX studio or manage film or episodic projects when multiple compositing supervisors are working at the same studio. They typically assign and ensure continuity between compositing shots while overseeing and managing compositing staff. Compositors will sometimes work directly with the supervisor or may go through compositing leads prior to supervisor interaction.

#### **VFX SUPERVISOR**

Oversees the creation and delivery of visual effects, working both with production staff and artists. The supervisor interacts with the client to ensure proper VFX setup and planning before, during, and after the onset shoot while ensuring that the client's vision is communicated to the studio. This is typically one of the highest levels of artist-related jobs in the industry and can take several years of work in VFX production to reach.

### **DEMO REEL** TIPS

To get a job in VFX, you'll need an amazing demo reel! Here are some tips to get you started.



Students, keep your reel < 1 min. If you have 1–2 years experience, < 2 mins.



Include any production experience you have.



Breakdowns are good but keep it to 3–4 quick wipes.



Always Include breakdown descriptions where applicable.



Use Vimeo the video quality is better than YouTube.



Everything in your reel should be 10/10, do not include mediocre work.



Keep the music fairly conservative, nobody listens to it anyway.



Watch your reel a lot of times and look for comp, edit, frame or spelling errors.



Get feedback from at least 3 instructors or industry pros before releasing online.



Show reference footage when applicable.



Share your reel with the world via LinkedIn, Facebook, Instagram.



Include the Houdini procedural workflow (if applicable) to impress recruiters.

Almost all schools train students to become generalists. If you are applying for VFX jobs at a small studio with less than 30 artists, they will most likely want a generalist. Larger studios will have separate departments, so a more specialized set of skills is desirable.



CHECK OUT VFX SUPERVISOR JORGE RAZON'S TOP DEMO REEL TIPS

## READY TO START YOUR CAREER?

There are lots of resources available to help you learn the software and become a great visual effects artist. However, it can often be hard to find the most up to date and relevant information or get professional feedback on your work. The best way to fast track your career as a VFX artist is to receive high-end training from industry professionals. CG Spectrum has developed specialized career training programs to get you job ready sooner.

#### LEARN FROM INDUSTRY PROS LIKE THESE:



DANIEL HOURIGAN
Manager of VFX
Game of Thrones,
The Wolverine,
The Hunger Games



SEAN AMLANER
Head of Nuke Compositing
Star Trek: Picard,
Star Wars: The Rise of Skywalker,
Avengers: Infinity War



GENEVIEVE CAMILLERI
Mentor of Nuke Compositing
VFX Supervisor, Fin Design + Effects
Doctor Strange, Star Wars: The
Force Awakens, Oscar-nominated
Love and Monsters



BRITTANY PIACENTE
Mentor of Nuke Compositing
Senior Compositor, Weta Digital
Loki, Star Wars: Episode VIII The Last Jedi, Mad Max: Fury
Road



**BEN FOX**Mentor of Houdini FX
Head of Digital Production,
Morehead Planetarium
Game of Thrones, Interstellar,
Ready Player One (VR)



JASON GOTTLIEB
Mentor of Nuke Compositing
Compositing Supervisor, FuseFX
The Walking Dead, American
Horror Story, Ozark

## OUR VFX COURSES

Get on track to finding your dream job with CG Spectrum's job-focused career training and industry mentorship. Students receive a Certificate of Completion at the end of each course.

#### HOUDINI FX PATHWAY



#### NUKE COMPOSITING PATHWAY



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## BENEFITS OF STUDYING AT CG SPECTRUM



#### INDUSTRY MENTORS

Learn from experts who have worked on major films and games.



#### **JOB-READY SKILLS**

Build practical and relevant job skills that studios are looking for.



#### CAREER DEVELOPMENT

Personalized support, portfolio/CV reviews, and interview prep.



#### FLEXIBLE SCHEDULING

Plan your studies around your work and family commitments.



#### **PAYMENT PLANS**

Pursue your passion and start working sooner with flexible payments.



#### **AMAZING ONLINE COMMUNITY**

Join our supportive community of students, alumni and mentors from all over the world.

## STUDENT SUCCESS

#### **VINCE BUFALINO**



"Working on feature and episodic work has always been a dream of mine, and as cliché as it sounds, to see my name on the big screen or on a streaming service."

#### MATTIA RODINI



"I found incredible support in my school community, which kept me motivated throughout the most challenging times!"

#### **ALAN ROBINSON**



"Studying with CG Spectrum was hands down the best decision I've made for my career."

"The amount I've learned in a year studying here is more than I could've ever learned in a traditional school or by myself.

I could never have dreamed to learn what I know now, and I'm able to apply the strong foundation that CG Spectrum has given me on my future education and career."

Laura Lekaviciute, Houdini FX student

## YOUR FUTURE IN VFX AVVAITS!

Explore courses and apply at cgspectrum.com

CPUSH yourself to get out of your comfort zone and just try things out. It may not work. It may be a failure, but failure is delay not defeat. I didn't get to where I am today by being comfortable. 33

Brittany Piacente, Senior Compositor, Weta Digital and CG Spectrum mentor

