Animation

Who doesn’t love an animated film? In the film and animation BFA program, you can bring your own stories to life on the big screen.
The animation option within the film and animation BFA program enables students to choose one of three tracks: 2D, 3D, or stop motion animation. Each allows for the exploration of the many facets of the animated form — from films, games, and AR/VR to digital effects, compositing, sound design, and the integration of animation with live-action storytelling. 2D animation concentrates on traditional forms drawn by hand, a mixture of both traditional and digital, or all digital origination. 3D animation courses focus on advanced 3D modeling, lighting, texturing, and animating in a 3D space. Stop motion focuses on digital technology in support of puppet fundamentals and non-puppet frame-by-frame techniques.

Regardless of the medium, students will make films from day one, culminating in a capstone film their final year. Students learn and create through the entire process, from story, design, and animation to post-production and distribution. They will draw, paint, rig, model, texture, light, build, and animate past the edges of their creativity while learning the art and craft of visual storytelling.

Labs and classrooms are filled with the latest software, technology, sound, and screening options, including TVPaint (2D), Maya (3D), Toon Boom Harmony, Dragonframe (stop motion), and the entire Adobe Creative Suite.

Graduates are qualified to begin careers in the industry (feature films, television, and video games) and create their own independent films for the global festival circuit. Students and alumni alike have produced award-winning films and made major contributions to the art, technology, and advancement of animation.

As part of the Film and Animation major, you will study topics including:

- Animation
- Computers and imaging technology
- Film history
- Film theory
- Production
- Sound recording

Topics in animation include:

- Acting
- Advanced courses in 2D, 3D, or stop-motion animation
- After effects for animators
- Character design
- History and aesthetics of animation
- Scriptwriting
- Storyboarding

Student Work
Left: Cameron Glynn.
Left film strip (top to bottom): Shana Dixon, Allison Larkin and Maggie Dybas, Yiran Qiao, Andrew Sonntag, Alyssa Minko and Amy Adams, Derek Gieraltowski.
Right film strip (top to bottom): Nelson Caliguia, Rachel Hochadel, Ben Doran, Sarah Dunton, Ben Doran, Ryan Platt.
Production

Develop and refine your creative approach as you produce innovative and artistic cinema.
As a student in the production option within the film and animation BFA program, you will explore fictional narrative, documentary, and experimental live action filmmaking. With insightful and accomplished faculty teaching in state-of-the-art facilities, students receive an unparalleled film education.

This path focuses on production through visual and sound artistry utilizing hands-on experience with camera, editing, and sound equipment. Students will understand the aesthetic principles of the art form and develop a range of technical skills while producing creative work from day one until graduation. Students also have access to labs and classrooms equipped with the latest software, technology, sound, and screening options to complete any project.

RIT offers more production experience than its peers and, as a result, draws students from all over the world. Students write scripts, recruit actors and crew, research documentary subjects, edit, mix soundtracks, experience critiques and screenings, and wait for the applause. This option requires many exercises and a minimum of three significant works, one of which is a year-long senior capstone film. Multiple production alumni have won Primetime Emmys due in part to the extensive practical experience they received at RIT.

Graduates are qualified to begin careers in industry or create their own independent productions. Work produced by students and alumni has been consistently honored with awards at international and national festivals.

As part of the Film and Animation major, you will study topics including:
- Animation
- Computers and imaging technology
- Film history
- Film theory
- Production
- Sound recording

Topics in production include:
- Directing
- Dramatic structure
- Fundamentals of screenwriting
- Production processes
- Production workshops
Motion Picture Science

Use artistry to drive engineering, and engineering to expand the tool sets for creativity.
In the motion picture industry, ingenious minds behind the most captivating shows and movies apply their knowledge of science and engineering, and use their passion for storytelling to make film, television, and animation possible. The motion picture science program is one of the first of its kind in the nation, providing a science and engineering education in the fundamental imaging technologies used for the motion picture industry. At its core, the program draws on the strengths of RIT’s longstanding imaging science program while concurrently providing a foundation in the art of filmmaking.

Utilizing research, critical thinking, creativity, and problem-solving principles, students are taught to address complex motion imaging workflow issues within the constraints of time, space, budget, and technology. Topics include film and digital image capture, image display, visual effects, digital image processing, imaging physics, optics, color science, and post-production engineering. Further, new facilities provide hands-on experience with the same equipment being used in major motion picture production today.

Graduates enjoy a variety of career opportunities, from feature film and television post-production to imaging equipment design and essential motion imaging technology research and development. Within the industry, alumni command considerable attention thanks to training that gives them a substantial advantage over more traditional engineering degree recipients. Alumni work in research engineering roles at technology and entertainment powerhouses like Netflix, Sony, Technicolor, and Dolby, as well as in technical post-production positions in digital color correction, sound design, visual effects, and more.

As a unique bachelor of science degree in the College of Art and Design, motion picture science students take a range of coursework across multiple colleges. You’ll study fundamental imaging principles including:

- Physics
- Calculus
- Imaging system fundamentals
- Color science
- Radiometry
- Vision and psychophysics
- Computing and control programming
- Geometric and physical optics
- Image processing
- Imaging probability and statistics

Your motion picture technical and creative principles coursework will include:

- Production fundamentals
- Animation fundamentals
- Sound recording fundamentals
- 3D animation fundamentals
- Digital effects and compositing fundamentals
- Production, post-production, and projection/display engineering technologies
Unparalleled Facilities

More than 25,000 square feet of studios, labs, and creative space are available exclusively for School of Film and Animation students.

Sound stage A
One of two soundstages in Gannett Hall, this premier video shooting environment features a freestanding, 17-by-17-by-20-foot high cove cyclorama wall painted chrome key green. The space also includes a suspended pipe grid, DMX-controlled lighting strips, a 48-channel programmable dimming console and lighting fixtures from 200 watts to five kilowatts. Rolling set walls, furniture, and wall coverings are available to enrich their set designs.
Pro Tools Editing Suite
Among several editing suites available, this suite boasts access to a sound-editing workstation equipped with Avid Pro Tools software, Genelec speakers and three monitors for video playback.

Narration Room
An area where students can perform voice-over recordings for animations and live-action productions. The School of Film and Animation also offers audio capture and audio control rooms, as well as a Foley Room for student use.

Equipment Cage
With nearly 1,000 video and audio-related items available, students borrow resources and equipment to make high-quality shorts and perform research.

Set and Prop Shop
An area for set piece construction for stop-motion animation. It includes power tools, hand tools, and a spray paint booth.
Founded in 2013, the RIT Center for Media, Arts, Games, Interaction & Creativity (MAGIC) is housed within a new 52,000-square-foot facility known as MAGIC Spell Studios.

Sound stage
A 7,000 square foot sound stage that provides resources and space to student filmmakers and commercial clients. The state-of-the-art facility is equipped with a loading dock, storage space, outfitted camera and lighting equipment, and a grip cage. The sound stage meets the requirements for the New York state film tax credit.
MAGIC Spell Studios is the only one of its kind in the Northeast and boasts the latest in technology and design, rivaling media production studios in New York City and Hollywood. It promotes the academic mission of the university, capitalizing on the energy, synergy, and convergence of multiple academic programs through project-based curriculum, faculty research and scholarship. MAGIC is a digital sandbox for students and faculty pushing the boundaries of technology, art and design.

MAGIC Spell Studios supports the entrepreneurial ambitions of our students and faculty who are seeking to publish and distribute films, computer games and interactive experiences or start new digital media businesses. It also serves as a home to outside commercial activity in film production, digital design, and game development, welcoming companies to interact with RIT’s best creative minds.

The facilities include five state-of-the-art classrooms with 4 stop motion labs built around delivering hands-on curriculum in game design, 2D and 3D animation, and digital design. Students learn on the same hardware and software platforms used in industry while honing their technical and creative skills. A fully outfitted sound stage and post-production studios further enhance experiential education opportunities and permit faculty to introduce real-world film, animation, and digital media workflows to the classroom.