3D Digital Design

Design 3D computer graphics for games, virtual worlds, augmented reality, medical and scientific simulations, data visualizations, and motion and broadcast graphics.

3D digital designers use their passion to create graphics for a variety of mediums — vehicles, avatars, lighting, environments, and more. The students’ graphics portray something new, visualize ideas, or simulate processes. RIT’s unique 3D digital design program extends far beyond the traditional 3D animation and visual effects applications. While students can explore their interest in developing assets, levels, and characters using advanced software, there is also room to discover and pursue new functions for 3D digital design.

The rigorous curriculum begins with design and 3D software classes focusing on design skills while empowering students to problem-solve, collaborate, and complete projects on time to specifications. The program merges hands-on experience with instruction in design theory, professional practice, ethics, aesthetics, innovation, international awareness, and the interdisciplinary aspects of the field in developing socially responsible products.

From day one, students use professional 3D software in game design, virtual reality, medical and scientific simulations, data visualization, models for architects and engineers, movies, motion and broadcast graphics, instructional media, and more. With faculty working together to expose students to professional practice and problem-solving strategies, students take advantage of many opportunities, from the annual 100-hour team project during the first week of the spring semester to internships, grants, co-ops, and independent and collaborative projects. You’ll have the opportunity to work with game programmers, engineers, musicians, scientists, animators, and medical professionals — allowing you to meaningfully apply your abilities while at RIT and after graduation.

You’ll study topics including:
- 2D, 3D, and 4D design
- 3D modeling and motion graphics
- Anatomical figure drawing
- Architectural visualization
- Character design and rigging
- Environment design
- Game design
- Vehicle modeling and hard surface design
- Lighting, materials, and rendering
- Motion and facial capture
- Project planning and production
- Realtime interactive design
- Previsualization and cinematography
- Simulations
- Virtual and augmented reality
- Visual effects, particles, and dynamics

Student Work
(Left) Michael Miller
(Right) Top row: Cassandra Valente, Brian Christmann.
Middle row: Hannah Wertz, Katarina Tesmer, Stephanie Chan.
Bottom row: Andrew Lytle, Jie Zhang.
A graphic design degree is perfect for students who eat, breathe, and sleep design, and would like to apply their skills in a hands-on way. In RIT’s graphic design program, students learn how to use design principles, methods, concepts, images, words, and ideas to creatively convey distinct messages to specific audiences. They become visual problem-solvers who use concepts and media to inform, direct, promote, entertain, engage, and educate. Students walk away knowing that designing is not just about how something looks, but rather the experience that’s created.

With a balance of history, theory, problem-solving approaches, conceptual exploration, applied problem-solving, human interaction, and the integration of technology, students gain the skills needed to create effective design solutions for a variety of media and audiences.

In the program, learning and inquiry extends far beyond the classroom. Access to world-renowned RIT resources such as the Vignelli Center for Design Studies and the Cary Graphic Arts Collection enables students to further discover inspiration. Additionally, alumni and guest speakers, internships, co-ops, and freelance experiences provide opportunities for enrichment in preparation for a career.

The program also engages in interdisciplinary projects within RIT and with outside organizations, resulting in meaningful experiences and innovative solutions. Through these, students are encouraged to explore the social, ethical, and environmental impact of design while solving real-world challenges. Graduates are well prepared to pursue positions within design firms, advertising agencies, corporations, and technology companies around the world.

You’ll study topics including:

- Advertising design
- Branding and identity design
- Design systems
- Exhibit and wayfinding design
- Experiential design
- History and research
- Information design
- Motion graphics
- Packaging design
- Typography
- UX/UI design

The overall intent behind this logo design was to visually represent the ferocity and empathy that Dragonheart Vermont displays daily. The design begins in the center, with a heart, to represent the core kindness of the organization. The negative space is made up of waves and the silhouette of a dragon's head, which also alludes to the legend of Champ, Lake Champlain's great monster. The logo is tied together with the three red arching bands, reminiscent of the sun setting on the beautiful Adirondack backdrop of the Burlington waterfront.
Industrial Design

From athletic wear, toys, and appliances to stereo systems and medical devices, create and develop products for consumers and manufacturers.

Industrial designers produce products used in our everyday lives. We believe industrial design education lies at the nexus of theory, process, and practice. The program helps develop the aesthetic sensitivity, technical competence, and analytical thought needed to improve a user’s experience. You will bring conceptual ideas to life by developing your technical 2D communication and 3D prototyping abilities. You will also learn how to formally move ideas and products to the marketplace.

Industrial design involves the integration of form and function as products are created by combining materials, process, computer-aided design, and human factors. Blending technical instruction with studio assignments, studies also include package, exhibit, and furniture design. Through hands-on experience in design research, graphic visualization, technical drawing, and other areas, graduates emerge with the skills needed to conceptualize, design, and develop innovative objects and systems, all with an eye toward a better world. By collaborating with RIT’s Golisano Institute for Sustainability and Simone Center for Innovation and Entrepreneurship, students address important social and environmental issues.

RIT’s world-renowned Vignelli Center for Design Studies also supplies a unique resource that reveals the nuances of design process seen through the lens of some of the world’s most masterful projects.

Students are exposed to high-level companies through initiatives like Metaproject and T-Minus 151. Metaproject is an annual studio course that pairs students with an industry partner, with several student designs evolving into commercial products. T-Minus 151 is a program-wide design workshop in which students complete a sponsored project. Winning concepts have moved on for further development and implementation.

Our graduates are creating impactful work around the globe — including Patricia Moore ’74 and Scott Wilson ’91, each a recipient of a National Design Award, a distinguished honor given by Cooper Hewitt, Smithsonian Design Museum. Other alumni employers include Adobe, Apple, Autodesk, Fisher-Price, and Nike.

You’ll study topics including:

- 2D and 3D sketching and refinement
- Computer-aided design
- Form
- Human factors and user interaction design
- Industrial design history
- Model making
- Needs finding
- Portfolio development and resume building
- Project documentation
- Soft design
Student Work
(Left) Kelly Zhang
(Right) Top row: Tiancheng Liang, Kelly Zhang, Rong Cao, Johanna Flahiff.
Middle row: Team (Brandon Lau, Tyler Monica, Conrad Troller, Shahd Zubier), Daniel Shapiro, Anthony Molle, Kaitlyn Gillmor.
Bottom row: Morgan Merrick, Karen Liu, Olivia Noll.
**Interior Design**

Design history, building systems, space planning, and design process are used to create inspiring, purposeful interior environments.

Students in RIT’s interior design program are design thinkers who are environmentally and socially conscious. They work with real-world clients to design impactful solutions that enhance the way people live, work, heal, prosper, and play. Students transform spaces and experiences for the greater good using sustainable design and space-planning methodologies. The BFA program synthesizes design history, building structure and systems, space planning, and design process with a consciousness of global affairs.

Faculty are experienced, certified professionals who promote relevant skills that allow students to address today’s design issues. Students in the program, accredited by the Council for Interior Design Accreditation, contribute to society and the profession through multidisciplinary collaborations that address pressing global concerns. A prime example is the RIT Hope for Honduras initiative — a multidisciplinary contingent of faculty, students, and alumni creating awareness and innovative design solutions to improve the quality of medical care and education in the Central American country.

The program’s International Interior Design Association (IIDA) Campus Center facilitates networking and interaction opportunities for students with professionals. And RIT’s world-renowned Vignelli Center for Design Studies provides an understanding of the process and product of design by the most acclaimed designers. Dedicated studio and lecture spaces afford students the freedom to interact with peers and faculty one-on-one, fostering teamwork and collaboration.

You’ll study topics including:
- Building systems
- Color and lighting theory
- Contract documentation
- Design drawing
- Digital graphics
- Exhibition and merchandising design
- Health care design
- Hospitality design
- Interior and architectural history
- Materials and specifications
- Multi-story/multi-purpose design
- Office design
- Social and community design

Student Work
(Above) Marla Murrett and Alexa Boyd.
(Right) Top row: Samantha O’Neill, Samantha O’Neill, Marla Murrett and Alexa Boyd. Middle row: Madison Miller, Hyperspace Team (Samantha O’Neill, Christopher Beckley, Min Jang, Melissa Mountain, Riley Nally), Raquel Rojas. Bottom row: Michelle Reuter, Christopher Beckley.
Inspired by Zaha Hadid’s many creations, this design strives to emulate a look that is equal parts organic and technical. Progressive in its approach, it stands out from the rest. While other healthcare facilities try to recreate a hospitality setting, this design capitalizes on the idea that a hospital should not look like a home at all. But instead a place of prestigious medical practice, with surroundings that reinforce this as the design works to highlight the most advanced technology.

**SCHEMATIC CONCEPT MOOD BOARD**

**THE FUTURE PATIENT ROOM**

- **WARDROBE**
- **PULL-OUT BED**
- **REFRIGERATOR**
- **FOLD-UP DESK**

**PROJECT STATEMENT**

25 Gibbs Street, Rochester, NY 14604

**SCALE**

FRESH, FASHIONABLE, FLEXIBLE

The Rochester Music Hall of Fame will be located at 25 Gibbs Street in downtown Rochester, NY. The renovation of the interior will feature a collaborative environment between present and prospective musicians and those interested in the rich musical legacies from Rochester. Visitors will experience a movement through time from the dynamic and energetic musical vibes.

- **BI-FOLD WINDOW**
- **INDUCTEE HALL OF FAME DISPLAY**

The bi-fold window located on the left side of the storefront will expand the experience to the exterior of the building. During performances or events, the bi-fold windows could fold upwards to allow the music to pool into the streets and become an inviting tone for people passing by. On the interior, there is a height adjustable countertop with seating for visitors to relax and watch the shows.

The Inductee Hall of Fame is a semi-secluded permanent area of the space to display historical artifacts and treasures of the inductees. This also could be used as a location for book signing or press interviews that display the musical history of Rochester as the backdrop.
New Media Design

At the intersection of visual communication, design strategy, technology, and user experience design, new media designers are the innovative thinkers and creators of the next generation of digital media.

Millions of people interact with digital devices every day. RIT’s new media design BFA degree allows students to explore the many aspects of digital design, providing the skills needed to create ingenious work. A student-centered curriculum, accomplished faculty, and state-of-the-art facilities prepare students for a dynamic career.

New media design is for those fascinated by visual design, user experience design, interactivity, motion graphics, web design, and technology. It’s an interdisciplinary major whose alumni network constantly leads the way in pushing industry forward. Graduates innovate and leverage technology that makes today’s most cutting-edge user experiences and mobile devices. When you open a mobile application, chances are an RIT new media design graduate touched the process. Alumni hold positions at companies such as Adobe, Google, Lyft, Microsoft, Netflix, and Spotify.

Students in the program create user-centered solutions that influence new opportunities in visual design, communication, and user experiences. Through collaborations with industry partners and alumni visits, students interface with esteemed professionals and hone their skills for the marketplace. The program has partnered with Constellation Brands, Forbes, Rochester Regional Health, and more to create rewarding experiences and projects, including AR and VR projections, physical and mobile experiences, and games.

Teamwork experience also comes from collaborations with students in RIT’s new media interactive development major, emphasizing the all-important designer-programmer relationship. Upon graduation, students are well-positioned for careers in visual, interactive, and user experience design for digital advertising, marketing, mobile, web application, entertainment, and corporate design.

You’ll study topics including:

- 2D, 3D, 4D design
- Digital drawing
- Design animation
- Design elements
- Graphics/user interface design
- Motion graphics
- Programming
- Usability research
- Visual design
- Web design graphics

Student Work
(Left) Amanda Ho.
(Right) Left column: Tim Torres, Sarah Danseglio, O-Whale Team (Luka Shulz, Bennett Schoonerman, Andy Kuki elka, Colleen Albert, Zoe Kniskern, Amando Ho, Stephen Cerbone, Rebecca Wengert). Middle column: Anne Elliott. Right column: Melissa Samworth.
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