FROM THE PRESIDENT

Experiencing the future with technology, the arts, and design

Are you ready to explore? Are you ready to experience the unexpected and extraordinary? We commonly pose these questions to RIT students. Today, their level of curiosity, energy, and enthusiasm is back to pre-pandemic levels, perhaps even higher.

Our university has been on to something during the pandemic—planning, designing, building, and executing on ideas from students, faculty, and staff. We have the proof points to show RIT is among the top universities in the nation integrating technology, the arts, and design. And perhaps equally important at this time in history, we put a premium on bringing goodness to the world.

RIT is in high demand with undergraduate applicants—we have experienced our two largest incoming classes in 2021 and 2022. We are seeing a higher-quality pool of applicants, based on standard measures such as GPAs, rank in class, and leadership traits, as well as stronger interest from underrepresented populations. Overall, about 19,700 undergraduate and graduate students will add to our family of more than 145,000 alumni. This includes our overseas campuses in China, Croatia, Dubai, and Kosovo.

Our students are thriving, taking home top prizes at national and international collegiate competitions. They are squaring off against some of the best universities in the world and bringing home trophies in cybersecurity, gaming, racing, and design competitions. When teams from around the world arrived at RIT last summer for the Baja SAE competition, the RIT team entered the event ranked No. 1 in the world. These Baja racers climb hills, surmount obstacles, and survive endurance challenges. And RIT Baja stepped up to the challenge, winning yet again.

Embracing challenges brings out the best in RIT. The university is coming off a record year in sponsored research awards, attaining $92 million. Some key areas of investigation include nanotechnology, imaging science, cybersecurity, artificial intelligence, accessibility, public policy, and the life sciences.

We are also reimagining our future by forging ahead with the largest construction projects in our history with nearly $500 million in capital investments on the books. We are transforming RIT by building places and spaces for creators and makers.

This transformation includes the Student Hall for Exploration and Development, or what we call the SHED. This showcase facility will open in fall 2023 as the creative and innovative hub of the university. (Read more on page 18.)

We literally are setting the stage for performing arts as we break ground on the first theater in our performing arts center this year. (Read more on page 20.)

Let me conclude and summarize by saying that RIT is embracing and designing a very bright future. Our amazing community of creators and innovators is shaping the world through ideas that inspire, inform, and improve lives.

Proudly yours,

Dave

David C. Munson Jr., President
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Transforming RIT: The Campaign for Greatness

The $1 billion campaign is bringing RIT’s 2025 Strategic Plan to life and has made an impact on every project featured on the pages ahead. The blended campaign seeks support from a variety of investors, including alumni and friends, government and corporate partners, and research foundations and agencies. The campaign has raised more than $975 million and we are in the home stretch.

Learn more at: rit.edu/transformingRIT
People
Community
Performing Artists
Diversity and Inclusion
Learning Together

Programs
Experiential Learning
Growing Research
Unique Curriculum

Places
The SHED
Music Performance Theater
Athletics Upgrades
Future Development
Innovative Spaces

Partnerships
Global
National
New York State

By the numbers
Enrollment
Giving
Research

About the cover
Left to right:
Boris Sapozhnikov, graduate student in media arts and technology;
Sam Su, second-year photojournalism;
Ekua Quagraine, fourth-year international business;
Isabella Daquita, fifth-year mechanical engineering;
TK Sylvester, fourth-year advertising and public relations;
Quaid Guarino, fourth-year biology;
and Grace Yehl, fourth-year marketing.

By the numbers

R2
Carnegie Classification of Institutions of Higher Education research ranking.

$92 million
Sponsored research awards for the 2021-2022 fiscal year.

21%
Increase in research funding since last year.

About the cover
Photos by Scott Hamilton
RIT is a place where students with diverse interests come together to grow and thrive. **Our students are creating a community** where their individuality, creativity, and innovation are always celebrated.
Performing Arts Scholars hit new high
More students involved in performing arts are currently enrolled at RIT than ever before. This year’s class includes a record 482 new students who received Performing Arts Scholarships. That brings the total number of students who received the scholarships to 1,357 in the four years they have been awarded.

RIT President David Munson has pushed to recruit more students involved in the performing arts. Munson wants RIT to be the leading school in the country for performing arts for non-majors.

David Hult, director of RIT’s Performing Arts Scholars program, said the scholars must participate in a performing arts course or co-curricular activity for one full semester each year. RIT faculty members serve as mentors to the scholars, who submit surveys and short reflection statements each semester explaining what they did and learned.

Hult said most of the students applied for their scholarship because they wanted to save a place in their lives, and their busy academic schedules, to actively pursue their love of the performing arts.

Rachel Horrigan, a second-year motion picture science major from Needham, Mass. (dance), said her scholarship in dance wasn’t the main reason she came to RIT, but it definitely was a bonus.

“I would have been a little more reluctant to go to a school that didn’t have a performing arts program,” she said. “I’ve been dancing since I was 4, and I don’t want to give up something that has been my life since I was little.”

Horrigan, who enjoys ballet and classical dance, has joined DanceCore and is working with professional choreographers.

Nigel Joseph, a first-year computing security major from York, Pa., began singing in the fifth grade, including in school, choirs, and community events.

A classically-trained operatic tenor, Joseph was eyeing RIT five years ago as a college option and called to see if scholarships were offered for students interested in music.

“They said something was in the works,” he said. “So I was just holding out hope because music is very important to me. I wanted to go to RIT to pursue my degree and continue my music.”

Joseph has had a busy first year but has found time to join the RIT Singers, take private vocal lessons, and participate in external singing opportunities in churches and community organizations.

Last summer, RIT’s College of Liberal Arts launched a new School of Performing Arts.

Its director, Erica Haskell, wants students to think beyond their boundaries and explore how performing arts can pertain to the students’ majors, community, and lives.

Left to right: Nigel Joseph, a first-year computing security major from York, Pa. (voice); Katie Updegrove, a second-year graphic design major from Branchburg, N.J. (circus arts); Keyazsha Ashford, a first-year photography major also from York, Pa. (acting and dance); Rachel Horrigan, a second-year motion picture science major from Needham, Mass. (dance); Isaac Liu, a second-year biomedical engineering student from Montclair, N.J. (trombone); and JP Queenan, a third-year business management major from Newtown, Conn. (tech crew).
Community members commit to diversity and inclusion

People from across the university are helping RIT make substantial progress on the initiatives laid out in the Action Plan for Race and Ethnicity. Launched in July 2021, the plan unveiled an extensive series of initiatives designed to make RIT more diverse, equitable, and inclusive.

The plan’s three main pillars focus on leadership, culture, and communication; African American, Latino American, and Native American (AALA-NA) student enrollment and success; and faculty and staff recruitment, retention, and advancement. Last fall, the university provided an update regarding initiatives in the plan through a Year One Score Card, and a majority of the action steps are completed, nearly complete, or ongoing, with just a few items still in their initial stages.

“This plan highlights RIT’s commitment to look at and address systemic racial inequities and injustices as we strive to enhance a sense of belonging among our students and employees,” said Vice President and Associate Provost for Diversity and Inclusion Keith Jenkins. “I’m pleased by the way partners from across the university have embraced opportunities to join in this important work.”

One of the most significant accomplishments in 2022 was the inaugural Together RIT: A Day of Understanding, Solidarity, and Racial Reconciliation on Oct. 21. The event, intended to be an annual tradition, drew hundreds of RIT students, faculty, staff, and alumni to engage in intentional and honest dialogue about race, ethnicity, and racism. Together RIT featured nearly 30 events across campus varying from interactive lectures to film screenings to a PC game-testing session.

Another important stepping stone was conducting the Diversity and Equity Campus Climate Survey of students, faculty, staff, and administrators in spring 2022. The survey, along with other assessments led by groups including the Student Success Steering Committee and Division of Marketing and Communications, will provide recommendations for achieving a more inclusive, engaging, and supportive environment.

New positions have been established across the university to help drive diversity efforts. Newly-appointed Strategic Priority Fellow in Diversity, Equity, and Inclusion Torrence Sparkman will enhance education of faculty and staff to more effectively support underrepresented students. At the college level, new positions include the College of Science’s inaugural Director of Diversity, Equity and Inclusion Lea Michel, and the Golisano College of Computing and Information Sciences’ Director of Diversity Initiatives & Women in Computing Lana Verschage and Assistant Director of Diversity Initiatives Barbara Contreras.

These efforts continue to gain RIT recognition for its work in diversity. INSIGHT Into Diversity magazine designated RIT as a 2022 Higher Education Excellence in Diversity (HEED) Award recipient and a 2022 Diversity Champion. This marks the ninth year in a row RIT has been named a HEED Award recipient and eighth consecutive year as a Diversity Champion.

Luke Auburn ’09,’15 MS

Togetherness RIT
The RIT community gathered on Oct. 21 for the inaugural Together RIT: Day of Understanding, Solidarity, and Racial Reconciliation.

A Criminal Justice
Senior Lecturer Joe Williams, right, and Tamar Carroll, Department of History chair, led a discussion about the Attica Prison uprising.

B Mary-Frances Winters, a diversity consultant and one of RIT’s earliest Minett Professors, delivered the closing keynote address.

C Sunshine 2.0, a professional traveling theater troupe based at NTID, performed.

D Keith Jenkins, RIT’s vice president and associate provost for Diversity and Inclusion, provided the opening keynote remarks.

E Students, faculty, staff, and alumni gathered in small groups for intentional discussions about race, ethnicity, and inclusion.
About NTID
Established by the U.S. Congress in 1965, RIT’s National Technical Institute for the Deaf is the first and largest technological college in the world for deaf and hard-of-hearing students.

Second-year student Graci Dietrich said the support of her teammates, coaches, and interpreters enriches her experience as she plays the game she loves at the collegiate level.
Student Graci Dietrich chose RIT because she wanted to be part of a university where Deaf culture is celebrated. She is one of nearly 1,000 deaf and hard-of-hearing students supported by RIT’s National Technical Institute for the Deaf who help create a welcoming, inclusive, and vibrant environment on campus.

The second-year nutritional science major, and center on RIT’s women’s basketball team, is pleased that she has found a sense of belonging and a home where deaf, hard-of-hearing, and hearing people can learn and grow just by being together.

“My sister and I were the only deaf people in our small town, and I used an interpreter as the only deaf person on my sports teams,” said Dietrich, who is from Glenwood Springs, Colo. “I was looking for a place where I wouldn’t be alone and could find people who I could relate to. At RIT, not only am I with deaf and hard-of-hearing people who are welcoming regardless of one’s upbringing and level of involvement in the Deaf community, but I’ve found that the rest of the community is interested in learning about Deaf culture."

RIT is one of the most accessible education communities in the world for deaf and hard-of-hearing students. To help level the playing field, NTID provides its student body with in-house interpreters, real-time captionists, and trained notetakers.

The presence of NTID, the first and largest technological college in the world for deaf and hard-of-hearing students, also adds to the richness of campus. NTID students live, study, and work alongside hearing individuals, which benefits everyone, said Gerard Buckley, NTID president and RIT vice president and dean.

“The importance of NTID’s presence on the RIT campus is immense,” he said. “NTID brings a richness of diversity not found on any other university campus in the country.”

Vienna McGrain ’12 MS
More than 5,000 RIT students each year apply what they are learning in the classroom to meaningful work experiences.

A majority of undergraduate programs require a cooperative education or internship experience, where students can help define their career path and earn a salary. RIT’s co-op program is one of the oldest in the nation, beginning in 1912.

Meet four students who recently took time between classes to work in their fields.

Anna Pasquantonio, a sociology and anthropology and museum studies double major, completed a summer 2022 internship with the National Geographic Society.

Anna Pasquantonio

More than 5,000 RIT students each year apply what they are learning in the classroom to meaningful work experiences.

Real-world experience a hallmark of RIT education

RIT Croatia student Matej Dugandžić took a step toward fulfilling his long-term vision of owning a luxury hotel when he did a co-op with the Hilton Imperial Dubrovnik hotel last summer.

RIT Croatia
Finding a future profession

Fourth-year student Anna Pasquantonio has always loved National Geographic and has fond memories of collecting animal trading cards from the National Geographic Kids magazine. Pasquantonio’s summer 2022 internship experience at the organization’s headquarters in Washington, D.C., helped turn a life-long interest into a possible career.

Pasquantonio, a sociology and anthropology and museum studies double major from Millis, Mass., worked as a film and media archives intern, cataloging and processing a wide variety of audiovisual materials from the National Geographic Society.

“National Geographic was using the best technologies available at the time they captured all of this content. So, the collections have everything from 16 millimeter Kodachrome film, to VHS tapes and DVDs, and everything in between,” said Pasquantonio. “I did a lot of work making sure the objects were in proper conditions, and that they were labeled and in the database correctly. Then, specifically with the film materials, I rehoused them to meet archival standards.”

Pasquantonio was first introduced to media preservation in an Introduction to Cultural Heritage course, taught by museum studies Professor Juilee Decker. As part of a class project, students worked with National Geographic’s film and media collections archivist, Melissa Sagen ’15 (museum studies), to catalog media from the organization’s archives.

After completing the project, Pasquantonio knew this type of work was what she wanted to do for her career. When she saw the internship listing at the National Geographic archives, she jumped on the opportunity to get more experience.

“This internship solidified everything and validated that this is legitimately something I want to do, and it’s something I’m not too bad at,” she said. “It also gave me a lot of hands-on experience that I wouldn’t have had on campus.”

Pasquantonio’s internship was sponsored in part by the Emerson Collective Youth Collaborative.

Dream job realized

Matej Dugandžić has long dreamed of owning a luxury hotel in his hometown of Cavtat, Croatia, on the coast of the Adriatic Sea. He found a path to achieving his vision when he flipped through the pages of a magazine and found an article about RIT Croatia’s hospitality and tourism management degree.

“I read that the program was giving students insight into the creation of bespoke luxury types of travel services,” said Dugandžić. “I always found this branch of hospitality very interesting and was surprised an academic institution was offering students an approach to this topic.”

Now in his fourth year with the program, Dugandžić had an opportunity to take his training beyond the classroom last summer when he co-oped at the Hilton Imperial Dubrovnik hotel. He served as a marketing assistant for 10 weeks, helping the hotel with social media, public relations, and various projects, including the hotel’s 125th anniversary celebration.

“I learned the most interesting things about the hotel and the era before it was constructed,” said Dugandžić. “I was given access to the most important documents mentioning the Grand Imperial Hotel’s construction, which marked the beginning of tourism in this part of the world. It was information overload but I was just soaking it in.”

Last year, Dugandžić was one of 353 RIT Croatia students who opted to enroll in co-ops at companies across 17 different countries and five continents. He called his co-op an amazing opportunity that provided him invaluable lessons he hopes to apply to his own business someday.

“I saw the tremendous effort that Hilton as a global chain puts into standardization of quality and empowering its employees,” said Dugandžić. “This is something that I would try to replicate as an owner of a hotel on the coastline in the future.”

Luke Auburn ’09, ’15 MS
Making connections in Los Angeles

When Sarah Mehani landed in Los Angeles in August 2022, her goal was to get more experience and connect with other aspiring filmmakers. She achieved that and more during her time as a rentals intern at AbelCine.

AbelCine is an audio-visual store that offers a wide range of equipment for media industry professionals to rent or purchase. While there, Mehani learned more about the technical components involved in high-quality videography. Her primary duties were checking in and pulling equipment for clients and doing quality checks to ensure nothing was malfunctioning.

In addition to expanding her technical knowledge, the internship also helped Mehani increase her industry connections.

“One of my coworkers was able to get me a copy of the American Cinematographer Manual from one of his old friends, which meant a lot to me because they’re not cheap and there are limited copies,” said Mehani. “That coworker also suggested that I attend an American Cinematographer open house that I hadn’t known about, and it was the most influential and important networking event I’ve attended since being in LA. I thought that was a kind gesture and it really made my day.”

The third-year film and animation: production option student from Buffalo, N.Y., secured her internship through the School of Film and Animation’s Study Away: LA program. Students in the program spent their fall semester learning from industry professionals in LA through internship experience and two new courses tailored specifically for the program.

Mehani is eager to continue to engage with the filmmaking community and hopes to return to LA, or to work in New York City, once she graduates.

“Working at AbelCine has helped me learn how to connect with others,” Mehani said. “The amount of information I learned while I was there, and all of the hands-on experience, can’t be compared to anything else. Between what I’m learning and the people I’m meeting, it’s priceless.”

Felicia Swartzenberg ’19

Electrical engineering student Tianna Seitz had a co-op at Apex Tool Group last summer testing high-end torque wrenches.
There are talented women in tools—and undergraduate Tianna Seitz found her place among them during her co-op at Apex Tool Group in Lexington, S.C. The third-year electrical engineering student was part of the company’s Research and Development (R&D) department testing high-end torque wrenches—tools to fasten bolts at proper tension specifications. She examined component vulnerabilities before the tool was moved into production, something she learned on the job.

"When you are working with embedded systems, you have to take into consideration both the schematic and the code, and that wasn’t an experience I had yet," she said.

Seitz chose Apex because of the mentorship opportunities. Sitting with the R&D department head during her initial interviews, she recalled his positive comments about her background, interests, and enthusiasm for the work. Last academic year, she was president of Engineering House, a special interest group for engineering students.

"Then, we started talking about robotics, something he was passionate about," said Seitz, who participated in FIRST Robotics in high school in York, Pa. "One of the main reasons I went into engineering was because of this, and I went into electrical engineering because I enjoyed building robots.”

After graduation, Seitz envisions her role in a company that expects her to bring a specific skillset but also to explore new and innovative ways to integrate technology.

"I’d like a job that is very exploratory that lets me grow with the industry," she said. "I’m an engineer because I like designing things. I like coming up with new solutions, and that’s what you get in the R&D field.”

Michelle Cometa ’00
Increases in collaborative projects and inclusion in statewide and national economic development initiatives combined for another record year of sponsored research funding at RIT.

The university surpassed $92 million in research funds for individual and interdisciplinary proposals—from developing novel, cutting-edge technologies to contributing to economic growth regionally and nationally.

Since fiscal year 2017, the amount had regularly hovered between $75 million to $80 million. "With federal funding, stimulus packages which are still being distributed, and even with the new Innovation Bill, there is an increase in money being distributed to federal agencies that fund research. Much of it is being directed toward universities and organizations emphasizing collaborations and economic development, all toward competitiveness of the U.S.,” said Ryne Raffaelle, RIT vice president for Research and associate provost.

Funding came from federal, state, corporate, and foundation resources and support many of RIT’s key research areas, such as nanotechnology, imaging science, cybersecurity, and artificial intelligence.

Many of these awards were funded through national agencies, such as the National Science Foundation ($13.5 million), the Department of Defense ($8.6 million), National Institutes of Health ($6.7 million), and both NASA and the Department of Energy ($2.5 million each).

Research centers that RIT had established over the past several years positioned the university to react quickly to national funding opportunities, Raffaelle said.

A new record also was set for the value of proposals submitted—$265 million.

Michelle Cometa ’00
Lishibanya Mohapatra, an assistant professor at RIT’s School of Physics and Astronomy, earned a five-year, $1.7 million grant from the National Institutes of Health to study how cells control the size of organelles. The award contributed to another record year of sponsored research funding at RIT.
Future cognitive science Ph.D. students will work in faculty-led research labs studying artificial intelligence and brain-inspired machine learning, language processing, cognitive neuroscience of deafness, and animal cognition.

**Doctoral offerings keep growing**

RIT is growing its Ph.D. offerings, adding one new program in the fall of 2023 and two in 2024.

This fall, Saunders College of Business will offer a Ph.D. in business administration, marking the university’s inaugural social sciences doctoral program.

Unlike traditional Ph.D. programs in business administration, the new program has sharp emphasis on the effect of technological innovations on key business functions like the marketing of products and services, strategic management of innovation, and finance and accounting practices.

In 2024, the College of Liberal Arts will introduce a new doctoral degree in cognitive science—the first-ever Ph.D. program to be housed in the Department of Psychology. This is a joint program with four other colleges at RIT.

Cognitive science combines multiple scientific areas to study the mind and its processes. Five central research areas include perception, language, philosophy of mind, cognitive modeling, and neuroscience.

A Ph.D. in physics coming in 2024 will provide students paths for careers in academia, industry, and government laboratories. It will draw from RIT’s strengths in areas including photonics and quantum technology, biological and soft matter physics, and physics education research.

RIT’s strategic plan calls for adding six to 12 new Ph.D. programs and conferring 50 doctoral degrees per year by 2025. The university already reached the latter goal with 51 Ph.D. degrees conferred in the 2020-2021 academic year.

Last fall, RIT enrolled 438 Ph.D. students in 11 Ph.D. programs. They are astrophysical sciences and technology, biomedical and chemical engineering, color science, computing and information sciences, electrical and computer engineering, engineering, imaging science, mathematical modeling, mechanical and industrial engineering, microsystems engineering, and sustainability.

Rich Kiley and Felicia Swartzenberg ’19
RIT students are working toward a bachelor’s and master’s degree starting from the first day of classes. This past fall, 740 new first-year students enrolled in RIT’s Combined Accelerated Bachelor’s/Master’s Degree program, designed for highly focused, goal-oriented incoming students. Although for years RIT has offered accelerated bachelor’s/master’s programs, this is one of a handful of such programs nationwide where incoming first-year students are offered conditional early acceptance to a master’s degree program.

Program enrollment has grown more than 10 percent since its inception last year, with expanded bachelor’s/master’s options to provide students with even more opportunities and flexibility.

First-year student Daniel Bossett already has his sights set on a career incorporating sustainable technology into mechanical engineering when he graduates with his master’s degree four years from now.

“I believe that earning an accelerated degree will give me additional skills and the ability to apply them sooner to face urgent sustainability challenges,” said Bossett, who is from Howell, N.J. “My interest in mechanical engineering comes from my long admiration for problem solving and passion to apply it. Since I was young, I have marveled at how engineering can expand human capability and how I can improve technology so dramatically over time.”

According to the program’s directors, the benefits to these scholars accelerating their degree programs are many. They include earning two degrees in less time while still taking advantage of cooperative-education experiences, internships, study abroad, early engagement and research opportunities with faculty, and special programming and activities. In addition, Combined Accelerated Bachelor’s/Master’s degrees offer a noteworthy return on investment, with both a cost savings and increased earning power with higher starting salaries.

Vienna McGrain ’12 MS
The SHED will have makerspaces, performing arts spaces, and extra-large classrooms that promote active learning. The facility will open this fall.
As students head to class each day, a new showpiece is rising at the center of RIT’s campus.

The Student Hall for Exploration and Development (SHED)—which was first announced in 2017 and funded in part by a $50 million gift from alumnus Austin McChord ’09—is a multi-use complex that will showcase RIT’s technology, the arts, and design. The SHED is on track to open this fall.

Stretching between Wallace Library and Monroe Hall, the SHED will feature a 98-foot-tall atrium. The complex will extend behind the library, creating an entirely new space with an expanse of glassed-in connections and interesting architectural features.

The creative hub includes the Brooks H. Bower Maker Showcase, the Sklarsky Glass Box Theater, and music and dance studios with advanced audiovisual technologies. The SHED’s focus on hands-on learning extends to its 27 newly finished classrooms—five extra-large learning spaces and 22 regular-sized classrooms in the renovated Wallace Library. New classroom furniture on wheels will promote active learning and make it easy for students to form small groups.

The $120 million complex is the largest construction undertaking on campus since it originally opened in 1968. The architectural style of the SHED departs from the brick-centric construction of RIT’s early buildings on the Henrietta campus. Instead of brick, glass is the dominant material in the SHED and, in contrast, will create a light, airy, and soaring presence that will draw students from across campus.

Work on the SHED has entered a new phase with a focus on finishing the building envelope and installing large glass panels to the exterior of the dance studio and on the bridges that connect the two sides of the building.

The SHED’s emphasis on glass continues inside the building, with nearly two-thirds of the interior walls made of glass, according to Mark Williams, principal project manager in RIT’s Facilities Management Services.

“When you walk around inside the facility, you can see into almost every space,” Williams said. “It will create a new kind of community at RIT.”

Susan Gawlowicz ’95
Current renderings for the first theater in RIT’s performing arts center. Construction is planned to begin this summer, with completion in 2025.

A 750-seat music performance theater will be constructed on the RIT campus to offer a venue for musical theater productions. The new building will be the first of two theaters in a performing arts center. The first phase will be an iconic building with more than 40,000 square feet of space, with anticipated completion in 2025.

The theater will have two balconies, costume and scene shops, as well as rehearsal space. And it will feature a restored historic theater organ as its centerpiece. Construction is expected to start this summer.

The second phase, which is funding-dependent, will be an adjacent building, larger than the first, with an envisioned 1,500-seat orchestra hall for larger audiences, an expanded lobby, and a stage big enough to accommodate a large philharmonic orchestra and major events.

The project is intended to provide more venues for the RIT community as well as options for community groups to hold concerts, talks, and other events. It comes as a result of thousands of RIT students participating in performing arts, as RIT works to develop the leading performing arts program in the nation for non-majors, attracting talented and creative students who can continue their passions for
music, dance, theater, and other performing arts.

The first phase is expected to cost more than $40 million, which is part of RIT’s approved capital bond project. Additional funds will be sought to restore and install the pipe organ. Several naming opportunities are available as well.

James Yarrington, RIT’s university architect and director of Planning and Design Services, said the Rochester area has numerous theaters, but there are few options for venues that seat between 700 and 1,500 people. By comparison, the Robert F. Panara Theatre in Lyndon Baines Johnson Hall has 440 seats.

“We are so pleased that construction is beginning on this important new building for RIT students and the community,” said Michael Maltzan, who heads the Los Angeles-based architectural firm bearing his name that designed the theater. “The music performance theater will serve as a new gateway to the campus and a destination supporting the extraordinary creativity that is fundamental to the culture at RIT, now, and as a part of the dynamic future of the university.”

The architect of record is local company SWBR.

Greg Livadas
Upgrades for Tiger Athletics

Tiger Stadium is officially a home of champions. Major renovations continue for RIT Athletics facilities, which benefit thousands of students.

A new artificial turf field, scoreboards, and lighting have been installed at Tiger Stadium. The project is expected to be completed in 2025 with the construction of a stadium complex featuring new seating, locker rooms, concessions, and a press box. The stadium will be home to men’s and women’s lacrosse as well as men’s and women’s soccer.

The men’s lacrosse team won the NCAA championship in 2021 and 2022, and will be a favorite to defend the title this season.

The first phase of the multi-million-dollar athletics improvements is complete with the relocation of the outdoor track facility and new all-weather artificial turf fields for the baseball and softball teams.

“These four new and upgraded athletic facilities will be a true focal point for Tiger spirit,” said Jacqueline Nicholson, executive director of Intercollegiate Athletics.
A ssociate Professor Michael Zemcov is an experimental cosmologist whose research on the early universe is getting a boost from one of several new lab spaces cropping up on campus.

RIT has been expanding its research footprint to accommodate the university’s growing research portfolio. The Student Hall for Exploration and Development (SHED), which opens this fall, is enabling the university to convert 10 existing classrooms, totaling more than 23,000 square feet, into new research space.

Another 14,700 square feet of research space opened in January in Brown Hall, which was completely converted into science and engineering laboratories.

The laboratories include the College of Science’s Genomics Center, two laboratories for the College of Science’s School of Chemistry and Materials Science, five labs for the Kate Gleason College of Engineering’s computer engineering department, and one for the College of Engineering Technology’s traffic studies and soils laboratory.

The research expansion doesn’t end there. A new two-story research building with approximately 19 laboratories is in the planning stages. Construction is expected to begin this summer with a competition date planned for 2025.

The new research space is being welcomed by faculty members. Zemcov is gaining a new 1,500-square-foot space in Orange Hall—more than double
Saunders College of Business has broken ground on the multi-million dollar expansion and renovation project at Max Lowenthal Hall. The project, expected to open in early 2024, will nearly double the building’s footprint and will offer cutting-edge teaching and learning spaces, opportunities for innovative research, state-of-the-art event and collaboration spaces, as well as renovations to existing spaces.

This project would not have been possible without transformational gifts from Saunders College alumni and friends, including serial entrepreneur, philanthropist, and college namesake E. Philip Saunders; Chance Wright ’18 (advertising photography), ’19 (MBA); Susan Holliday ’85 (MBA); the late Klaus Gueldenpfennig ’74 MS (electrical engineering), ’77 (MBA); Brigitte Gueldenpfennig ’81 (MBA); and Dinah Gueldenpfennig Weisberg ’97 MS (software development and management), ’03 (EMBA), who collectively committed nearly $12 million toward the project.

Additionally, Saunders College was awarded a grant from New York state as part of the Higher Education Capital Matching Grant Program.

The new building will feature student team rooms, applied research and case analysis labs, an event space and reception hall, state-of-the-art auditorium, a café, an executive MBA and executive education suite, a wine room in support of the hospitalinity program, and outdoor spaces with expansive views of campus.

Existing classrooms will also be renovated in support of innovative and student-centered pedagogy.

Taking care of business

“This new lab will allow us to work far more efficiently,” said Candice Fazar, a postdoctoral researcher in Zemcov’s research group. “Having everything in one place and easily accessible will enable us to switch between various aspects of our projects seamlessly, enhancing productivity.”

Luke Auburn ’09, ’15 MS and Michelle Cometa ’00

Associate Professor Michael Zemcov, center, looks at the space that will become his new lab with astrophysical sciences and technology MS students Benjamin Vaughan, far left, and Dale Mercado, second from left, and Postdoctoral Researcher Candice Fazar.

Vienna McGrain ’12 MS
EDUCATING FUTURE GENERATIONS IN HIGH-TECH COMPLEX

RIT opened the doors to its world-class home for cybersecurity in 2020, and it’s making the university one of the best places for cybersecurity education, training, and research.

The 52,000-square-foot ESL Global Cybersecurity Institute (GCI) adjoins the university’s computing college. It aims to help make the digital world safer and solve a problem currently plaguing the cybersecurity field—employers can’t find enough qualified professionals to hire.

The building has new computer labs, teaching spaces, and a conference center.

For example, the Air Gap Lab gives students the ability to work with dangerous malware, while staying safely sealed off from the rest of campus and the internet. In the Eaton SAFE Lab, students and professionals are hired to conduct real penetration tests for companies.

At the heart of the ESL GCI is the Cyber Range and Training Center—a virtual and physical lab that allows people to simulate network cyberattacks and problem-solving scenarios. Here, the institute offers immersive training sessions for organizations to generate the real-world feeling of responding to a cybersecurity crisis.

With the ESL GCI, RIT has been able to expand its nationally recognized computing security degree programs and focus on new research areas in cybersecurity. The building has dedicated space for the university’s cybersecurity club, RITSEC, and for students enrolled in the NSF’s CyberCorps: Scholarship for Service program.

The hall has also allowed the university to host computing security competitions for students, including the global finals of the Collegiate Penetration Testing Competition. At the event, students put their hacking skills to the test—seeing who is best at breaking into fabricated computer networks, evaluating their weak points, and presenting plans to better secure them.

Alex Beaver, a second-year computing security major, monitors a large-scale virtualized network during a student-run cybersecurity competition in the ESL GCI Cyber Range.
Dubai campus recognized for ‘quirkiness’

RIT Dubai’s new campus earned international recognition for its innovative design. Newsweek magazine named RIT Dubai’s Innovation Center to its “Quirkiest College Campuses” list in August.

The list highlighted campuses that “offer different points of view, not only through their curricula, but through their unconventional building styles.” The Innovation Center—designed to resemble the core of a quantum microchip—serves as the campus’s focal point, overlooked by all other academic buildings.

The 129,000-square-meter campus became operational in spring 2021 and has enabled RIT Dubai to continue its rapid growth. Enrollment this fall reached a record-high 1,282 students, more than double the total of 638 students in fall 2018.

Multidisciplinary center spurs creativity

The crown jewel of RIT’s Center for Media, Arts, Games, Interaction & Creativity, MAGIC Spell Studios brings together the university’s academic strengths in game design and development, film and animation, and digital media, with a commercialization focus that provides Hollywood-scale virtual production experiences for students and clients.

Since opening in 2018, the studio has grown and includes a state-of-the-art film sound stage, sound mix and color correction post-production studios, a 4K Dolby Atmos theater, and several working media laboratories.

Today, MAGIC Spell Studios is a hub of multidisciplinary collaboration. Students continue to develop the technical and creative skills to produce content that is publishable on platforms including Steam, Xbox, Itch.io, the Apple Store, and Google Play.

MAGIC’s research portfolio is expanding to include the development of health-centered games, and specialty programs like the MAGIC Maker program give students the funding and support to manage their own digital media projects and prepare them for publication and investment readiness.

In addition, MAGIC Spell Studios is growing its community incubator to connect with local indie developers and is also providing stipends for students to work on creative tool development.

“One notable hallmark of an RIT education, and a mission of MAGIC Spell Studios from day one, is the unique opportunity for our students to experience real-world professional growth and development alongside a network of professionals in their field,” said Director David Long. “MAGIC has experiential education and project-based learning at our core. We learn by making things here, but, just as important, we learn by breaking things, too.”
Programs with RIT’s international campuses are helping to make well-rounded students.

Six new scholarships being piloted this year will allow students from RIT’s main campus to travel to RIT Kosovo to explore the origin and resolution of armed conflict, reconstruction, and institution building at the end of wars.

The Frederick C. Cuny Peace and Conflict Summer Program opens with a one-week study tour to Albania, Montenegro, Croatia, and Bosnia and Herzegovina, where students meet officials and activists and visit historic and recreational areas in the Balkans. Upon return to Pristina, students work in Kosovo’s living laboratory of history in the heart of the Balkans.

“The Peace and Conflict Summer Program is a powerful and unique opportunity for students to learn about the peace process directly from diplomats and practitioners who were on the ground during the Kosovo crisis, while visiting relevant sites and touring some of the most beautiful countries in Eastern Europe,” said Lauren Hall, chair of the Department of Political Science. “We’re incredibly lucky to have this relationship with RIT Kosovo, and we’re thrilled that, through these scholarships, we can continue to deepen this partnership.”

The program is one of more than 600 study abroad programs in 60 different countries offered to RIT students.

Although study abroad experiences ground to a halt during the outbreak of the coronavirus pandemic, students are once again heading overseas in large numbers to gain one-of-a-kind experiences beyond the classroom.

In the 2021-2022 academic year, 383 students participated in study abroad experiences. In 2018-2019, the last academic year before the pandemic, 464 students studied abroad, and RIT’s Office of International Education and Global Programs expects that number will be matched or exceeded by the end of the 2022-2023 academic year.

Luke Auburn ’09, ’15 MS
A national institute led in part by RIT marked five years of accelerating the transition to a circular economy in the United States in 2022. The REMADE Institute, founded in 2017 by the U.S. Department of Energy with an initial investment of $140 million, has grown to nearly 160 current members, including industry innovators, academic research institutions, trade associations, and national labs.

The consortium is focused exclusively on the development of transformational technologies geared toward designing for durability, reuse, remanufacturing, recycling, and recovery to keep products, components, and materials circulating in the economy and reducing energy consumption, waste, and greenhouse gas emissions.

Nabil Nasr, founding CEO of REMADE—short for Reducing EMbodied-Energy And Decreasing Emissions—calls the next decade “critical.”

“To meet our nation’s climate goals, achieve net-zero by 2050, increase U.S. manufacturing competitiveness, and increase the resiliency of the nation’s supply chain, the U.S. must lead as we face what many have called this generation’s greatest challenge,” said Nasr, associate provost and Golisano Institute for Sustainability’s director.

REMADE is part of Manufacturing USA, a national network of 16 federally designated, public-private partnerships united to secure U.S. global leadership in advanced manufacturing through large-scale collaboration on technology, supply chain, and workforce development. The institute is the first for which the university serves as lead member.

Since its founding, REMADE has launched or selected more than 80 projects, representing a total combined value of over $80 million and developing technology solutions that are capable of:

- Saving 1.2 quads of energy per year—the equivalent of conserving 206 million barrels of oil annually.
- Reducing 67.2 million metric tons per year of greenhouse gas emissions, equal to eliminating the annual emissions of 13.1 million cars.
- And supporting U.S. economic growth by generating up to $22 billion per year in new opportunities.

Rich Kiley
The ability to see through body tissue may sound like something from a science fiction movie, but a start-up company in RIT’s Venture Creations business incubator has developed a device that makes this possible.

EndoGlow, founded by Dr. Paula Doyle, provides fluorescent medical tools for surgeons to help increase their ability to make safe and effective decisions for their patients. Its patented polymer, which makes up the head of a specially designed manipulator tool, glows without power or batteries when viewed through the near infrared camera system that is already used with most surgeries.

“EndoGlow’s surgical instruments illuminate anatomic boundaries, subsurface pathology, and relative tissue depth. These features allow the surgeon to make better real-time decisions and, in effect, decrease surgical errors,” said Doyle, the company’s chief medical officer.

EndoGlow is one of several companies utilizing the services of Venture Creations, located in Rochester’s Downtown Innovation Zone. Founded in 2003, Venture Creations provides resources to client companies, including coaching from experts, educational events, office space, and a variety of connections to help with legal affairs, human resources, accounting, sales, and marketing.

Companies in the incubator also have the opportunity to network with each other, with other entrepreneurs in the region, and with companies that have since graduated from the incubator. In total, 47 companies have launched from the incubator, creating more than 600 new jobs and raising over $250 million dollars in capital.

“Being affiliated with RIT has been a huge benefit,” said Doyle. “Specifically, working with the university’s packaging department has been great. Medical devices have very specific packaging requirements and testing guidelines. RIT helped us establish contacts within the MedDevice packaging industry and has helped with testing.”

Venture Creations’ connection to the university also allows it to use RIT’s resources to enhance the technology industry in Monroe County and New York state.

“The benefits of an incubator affiliated with a major university are many,” added Johan Klarin, incubator director. “Not only are our companies able to work with expert faculty, they also have access to cutting-edge technology, expensive machinery and labs, as well as a community of students who are actively looking for opportunities to enhance their research portfolios and even gaining employment with some of the world’s newest and most innovative companies.”

Paula Doyle founded EndoGlow, a start-up company in RIT’s business incubator Venture Creations.
RIT is building upon its successful history of semiconductor development and research through an expansion to its cleanroom facility with help from New York state. Today, the Semiconductor and Microsystems Fabrication Laboratory in the Kate Gleason College of Engineering serves as a teaching and research lab, a testing facility for corporate partners, and a resource for multiple levels of workforce development training. Its future aim is to help drive the revitalization of the semiconductor industry in the United States.

Project planning for upgrades to the cleanroom, which is a centerpiece of microelectronic engineering, is nearly complete. Phase I construction is expected to launch early in 2023.

Changes will include upgrades to filtration and air handling systems, the addition of new wet processing stations to prevent cross contamination, and the creation of 5,000 square feet of collaborative research space focused on biomedical applications.

New York state has made significant investments in its strategy to become a semiconductor hub. RIT is positioned to be a major academic, economic, and employment resource for this vital industry in the region and in the country. RIT was awarded a $1 million Higher Education Capital Matching Grant (HECap) from the state that will be matched by the university and used to renovate the lab. In October, Micron Corp., an international computer chip manufacturing company, stated it would invest heavily in the state, building a new computer chip fab facility in Central New York.

The university’s upgraded cleanroom will remain a place where students learn the intricacies of developing computer chips and where new materials are continually tested to expand chip capacity.

Relationships with regional and national companies will expand as they assess how computer chips will be integrated into the newest technologies, and current employees in industries can receive training for needed skillsets related to electronic assembly and chip manufacturing.

According to the Semiconductor Industry Association, U.S. semiconductor companies have 47 percent of the global chips sales market, but only 12 percent are manufactured in the U.S. Demand for computer chips is outpacing supply, but this is on target to change.

Built in the mid-1980s to complement the microelectronic engineering degree program, the lab was the first of its kind at the time, and the program led the way to train engineers in what would become a powerful global industry. RIT graduates are skilled in fabrication techniques used to build computer chips that power newer technologies, such as artificial intelligence, quantum computing, biomedical sensors, and integrated photonics.

These technologies enable advances in smart systems for healthcare, transportation, manufacturing, and defense and security, among others.

Michelle Cometa ’00
Enrollment from all RIT campuses

Last fall, RIT enrolled a record number of students for the second consecutive year. Figures include global campuses.

<table>
<thead>
<tr>
<th>Year</th>
<th>Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2018</td>
<td>19,047</td>
</tr>
<tr>
<td>Fall 2019</td>
<td>18,897</td>
</tr>
<tr>
<td>Fall 2020</td>
<td>18,668</td>
</tr>
<tr>
<td>Fall 2021</td>
<td>19,718</td>
</tr>
<tr>
<td>Fall 2022</td>
<td>19,772</td>
</tr>
</tbody>
</table>

Enrollment for students from underrepresented races/ethnicities (AALANA)

AALANA = African American, Latino American, and Native American students. Excludes global campuses.

<table>
<thead>
<tr>
<th>Year</th>
<th>Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2018</td>
<td>2,006</td>
</tr>
<tr>
<td>Fall 2019</td>
<td>2,006</td>
</tr>
<tr>
<td>Fall 2020</td>
<td>2,207</td>
</tr>
<tr>
<td>Fall 2021</td>
<td>2,321</td>
</tr>
<tr>
<td>Fall 2022</td>
<td>2,386</td>
</tr>
</tbody>
</table>

Students studying at RIT’s global campuses

RIT has campuses in China, Croatia, Dubai, and Kosovo. Enrollment abroad continues to grow steadily, led by an expansion in Dubai.

<table>
<thead>
<tr>
<th>Year</th>
<th>Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2018</td>
<td>2,419</td>
</tr>
<tr>
<td>Fall 2019</td>
<td>2,566</td>
</tr>
<tr>
<td>Fall 2020</td>
<td>2,740</td>
</tr>
<tr>
<td>Fall 2021</td>
<td>2,971</td>
</tr>
<tr>
<td>Fall 2022</td>
<td>3,181</td>
</tr>
</tbody>
</table>

International student enrollment at RIT’s main campus

Last fall, RIT enrolled students at its main campus from more than 100 countries. These are the top countries outside the U.S. that RIT students come from.

<table>
<thead>
<tr>
<th>Country</th>
<th>Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>885</td>
</tr>
<tr>
<td>China</td>
<td>333</td>
</tr>
<tr>
<td>Canada</td>
<td>89</td>
</tr>
<tr>
<td>Nigeria</td>
<td>45</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>40</td>
</tr>
<tr>
<td>Vietnam</td>
<td>40</td>
</tr>
</tbody>
</table>

Tigers Connect

RIT’s online mentoring platform for creating professional connections between students and alumni is rapidly growing. Numbers are from fiscal year 2021-2022. Learn more at TigersConnect.rit.edu.

Alumni sign-ups: 3,630
Student sign-ups: 3,510

Ph.D. degrees awarded in 2021-2022

Last fall, RIT enrolled 438 Ph.D. students in programs across the university, with more programs scheduled to launch in 2023 and 2024.

<table>
<thead>
<tr>
<th>Field</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering</td>
<td>9</td>
</tr>
<tr>
<td>Imaging Science</td>
<td>9</td>
</tr>
<tr>
<td>Computing and Information Sciences</td>
<td>8</td>
</tr>
<tr>
<td>Color Science</td>
<td>4</td>
</tr>
<tr>
<td>Microsystems Engineering</td>
<td>4</td>
</tr>
<tr>
<td>Sustainability</td>
<td>4</td>
</tr>
<tr>
<td>Astrophysical Sciences and Technology</td>
<td>2</td>
</tr>
<tr>
<td>Mathematical Modeling</td>
<td>2</td>
</tr>
<tr>
<td>Mechanical and Industrial Engineering</td>
<td>2</td>
</tr>
<tr>
<td>Electrical and Computer Engineering</td>
<td>1</td>
</tr>
</tbody>
</table>

Degree programs with the highest enrollment at RIT’s main campus

RIT’s main campus enrolled 13,975 undergraduate students and 2,705 graduate students this fall across nine colleges and two degree-granting institutions.

**Undergraduate**

- Computer Science (BS) 1,140
- Mechanical Engineering (BS) 974
- Game Design and Development (BS) 787
- Software Engineering (BS) 614
- Computing Security (BS) 534

**Graduate**

- Computer Science (MS) 327
- Data Science (MS) 177
- Business Administration (MBA) 130
- Computing and Information Sciences (Ph.D.) 115
- Human Computer Interaction (MS) 89
### Total commitments
Outright gifts and pledges committed each fiscal year.

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2018</td>
<td>$25,061,296</td>
</tr>
<tr>
<td>FY 2019</td>
<td>$34,346,513</td>
</tr>
<tr>
<td>FY 2020</td>
<td>$32,140,304</td>
</tr>
<tr>
<td>FY 2021</td>
<td>$31,022,406</td>
</tr>
<tr>
<td>FY 2022</td>
<td>$35,181,612</td>
</tr>
</tbody>
</table>

### Philanthropic receipts
Cash and other tangible assets received each fiscal year.

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2018</td>
<td>$33,520,320</td>
</tr>
<tr>
<td>FY 2019</td>
<td>$31,658,998</td>
</tr>
<tr>
<td>FY 2020</td>
<td>$38,354,138</td>
</tr>
<tr>
<td>FY 2021</td>
<td>$29,604,371</td>
</tr>
<tr>
<td>FY 2022</td>
<td>$43,747,836</td>
</tr>
</tbody>
</table>

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**Research at RIT**

- **R2**
  - Carnegie Classification of Institutions of Higher Education research ranking.

- **$92 million**
  - Sponsored research awards for the 2021-2022 fiscal year.

- **21%**
  - Increase in research funding since last year.

- **15**
  - National Science Foundation CAREER Award winners since 2010.

- **$265 million**
  - Value of research proposals submitted in the 2021-2022 fiscal year, a new record.

- **79**
  - Number of master's and Ph.D. programs.

- **255**
  - Hours designated for RIT-led research on the James Webb Space Telescope in its first year.

- **1**
  - Robot teaching tai chi.