

ENGINEER THE  
**FUTURE**



**VCU**

VIRGINIA COMMONWEALTH UNIVERSITY

School of Engineering

“ VCU is a bastion of inclusion, unity and freedom of expression. Through a strong general education and training in entrepreneurship, interdisciplinary collaboration and identifying solutions to real-world problems, VCU School of Engineering graduates prepare to lead the way in finding creative solutions to this century’s challenges. ”

—Afroditi V. Filippas, Ph.D. | Associate Dean for Undergraduate Studies



 / VCUEngineering

 @ VCUEngr

 @ VCU\_Eng

 [egr.vcu.edu/linkedin](http://egr.vcu.edu/linkedin)

 VCUSchoolOfEngr



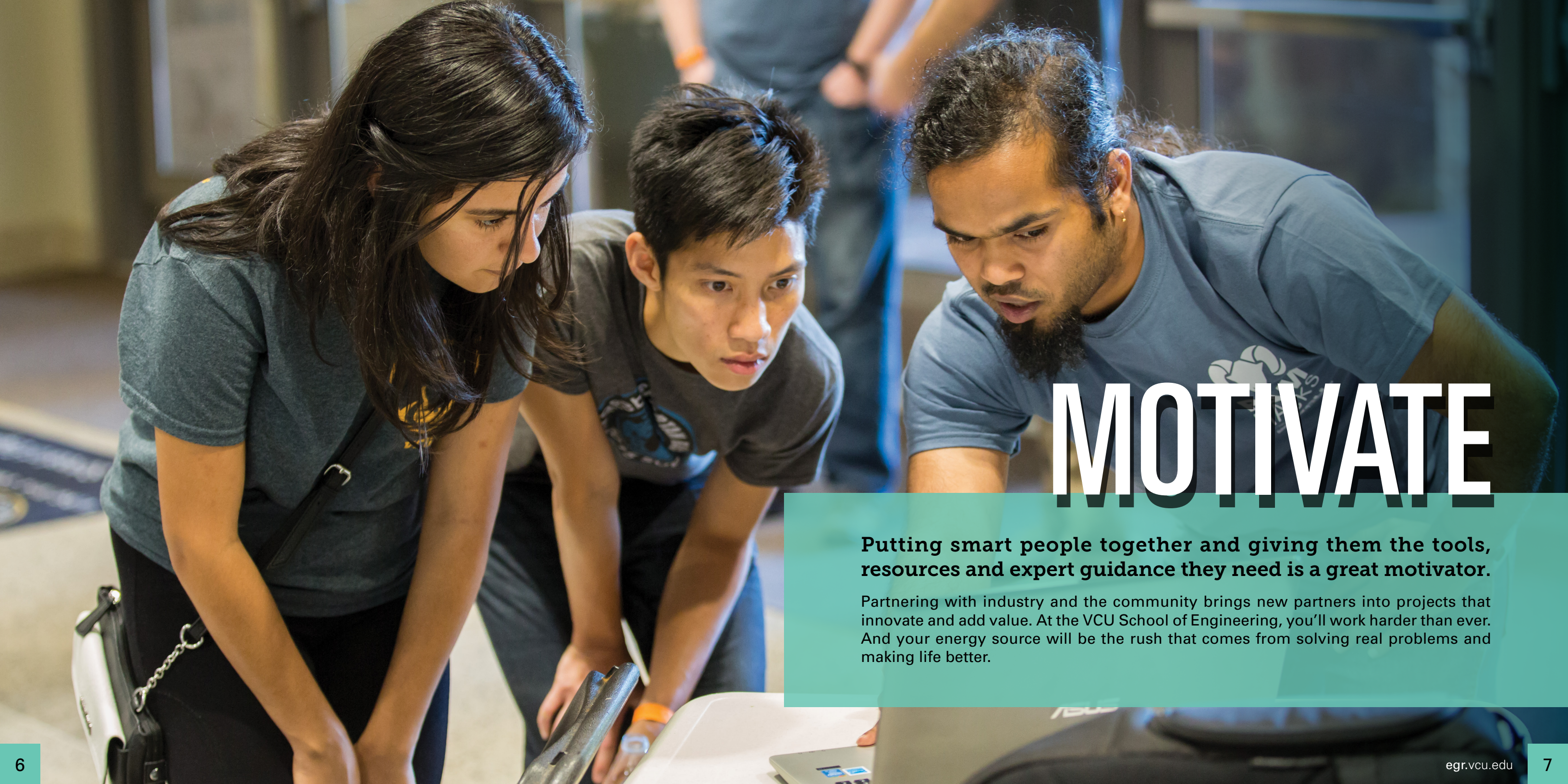
A photograph of two students in a workshop. A woman with brown hair, wearing a green jacket, is looking at a yellow drone. A man with short dark hair, wearing a light blue t-shirt, is holding a clear plastic canopy for the drone. The workshop is filled with tools, equipment, and other drones. The word "INNOVATE" is overlaid in large white letters on a yellow background on the left side of the image.

# INNOVATE

**At VCU School of Engineering, we're obsessed with innovation.**

As an engineering student at VCU, you will be dared to think in unconventional ways. You'll also be challenged to test and validate your ideas with scientific rigor. Our facilities are hubs of discovery, powered by an expanding student body and faculty committed to excellence. We make it real by turning great ideas into breakthrough technologies.





# MOTIVATE

**Putting smart people together and giving them the tools, resources and expert guidance they need is a great motivator.**

Partnering with industry and the community brings new partners into projects that innovate and add value. At the VCU School of Engineering, you'll work harder than ever. And your energy source will be the rush that comes from solving real problems and making life better.



A photograph of a Black male scientist in a white lab coat and safety glasses, smiling as he works in a laboratory. He is wearing purple gloves and is focused on a large yellow container. The background shows laboratory shelves with various equipment and supplies.

# TRANSLATE

**One of our hallmarks is moving research from the lab to the larger community.**

Because of our proximity to industry and incubators, as well as VCU's premier medical system, we regularly apply scientific discoveries to clinical and community settings. At VCU, you're part of an approach that translates scientific discovery from the bench to the bedside — and beyond.





# COLLABORATE

**Our culture and community make collaboration part of every student's curriculum.**

You may find yourself working alongside biomedical scientists in state-of-the-art laboratories next to the VCU Medical Center or with electrical and computer engineers in the Wright Virginia Microelectronics Center class 1000 cleanroom. The possibilities are many. Working together to build something great is what we do every day.



# What's Your Major?



## Biomedical Engineering

**“ We have extraordinary faculty and researchers, and the environment is very collaborative. Attending VCU has been an excellent career choice! ”**

—Lauren Griggs, BME student

### Help transform healthcare through innovations in technology, design concepts and engineering.

Whether you are interested in research, teaching, industry or clinical practice, VCU's Department of Biomedical Engineering (BME) prepares you to take your place in this exciting field. As a BME major at VCU, you'll study with faculty who are on the forefront of biomedical specialties including biomaterials, cell and tissue engineering, mechanobiology, human factors engineering and biomedical imaging. You will benefit from our longstanding collaborative relationship with the VCU Medical Center, one of the nation's leading academic medical programs. In fact, our majors have a very high acceptance rate into medical and dental school. Job opportunities include careers in pharmaceuticals, polymers/materials, biotechnology, environmental, and commodity/specialty chemicals.







# Chemical & Life Science Engineering

“ VCU is growing so fast. It's a place where I can make a name for myself in the engineering world. ”

—Anjali Nanjannavar, CLSE student



## Create solutions to the grand technological challenges facing the 21st century.

VCU's Department of Chemical & Life Science Engineering (CLSE) is developing chemicals, biochemicals and biologicals for applications including polymers, clean fuels, nanomaterials and medicine. As a CLSE major, you'll enter a rigorous program where you will work alongside researchers whose specialties include pharmaceutical engineering, stem cell engineering, nanotechnology and materials science. Our strong ties with VCU researchers in life sciences, biology, biochemistry, chemistry, medicine, dentistry, pharmacy and forensics mean opportunities for learning across the disciplines. Job opportunities include careers in pharmaceuticals, polymers/materials, biotechnology, environmental and commodity/specialty chemicals.



# Computer Science

“ Cool things are going on. In 24 hours, my Ramhacks team built an app that finds local doctors who accept your insurance. ”

—Emily Klein, CS student



## Shape the computing involved in nearly every aspect of modern professional and personal life.

VCU's Department of Computer Science (CS) prepares you for leadership in this future-forging field. Working with internationally recognized faculty researchers, you will master the principles of design, development and utilization of computers and software – and you'll use those principles to create algorithms for solving complex problems. Areas of study include cloud and network security, virtual reality, quantum computing, bioinformatics and data mining. As a CS major, you will also have access to eleven sophisticated computing labs. Job opportunities include software applications developer, computer systems analyst, computer systems engineer and software systems developer.





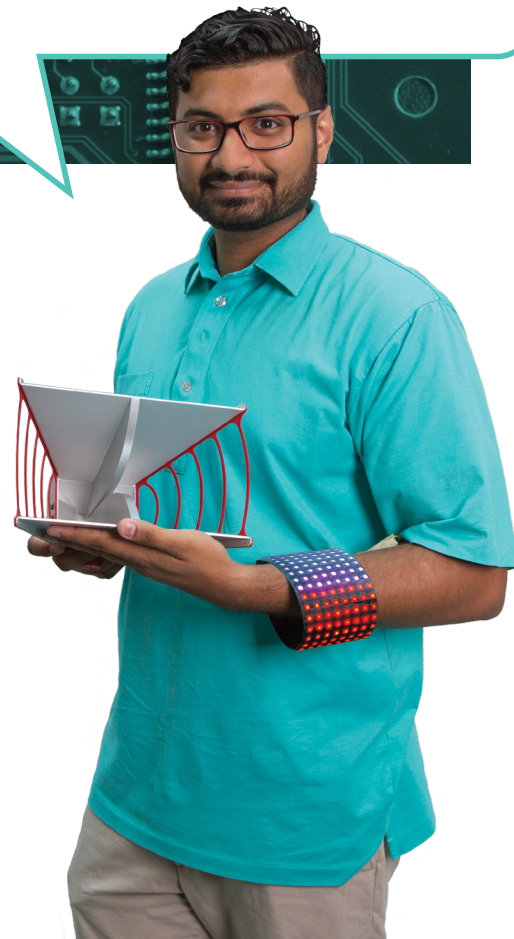
# Electrical & Computer Engineering

“ There’s an adrenaline rush in the UAV lab. You get your hands on amazing equipment and feel like this lab is your lab. ”

—Divyesh Patel, ECE student

**Advance the technologies that drive electronics, computers and communications.**

VCU’s Department of Electrical & Computer Engineering (ECE) works with systems that generate, transmit, process and measure information. As an ECE major, you will study with researchers shaping the next generation of electronic science and design, nanoelectronics, power generation and controls and communication. You will be challenged to link technical fundamentals with business principles, social issues and team building. Job opportunities include computer hardware engineer, specialized device designer, integrated circuits and solid state devices engineer, robotics engineer and power systems engineer.



# Mechanical & Nuclear Engineering

“ The School of Engineering is a family. Across the departments, you find people working together. People here want to help you with research, and want to help you grow. ”

—Miguel Toro Gonzalez, MNE student

**Master and improve how systems work – at the macro and micro level.**

Mechanical engineering is one of the broadest fields of engineering and VCU’s Department of Mechanical & Nuclear Engineering (MNE) is the largest in the School. Nuclear Engineering is offered as a major concentration within the department, and nuclear engineers harness the power of atomic nuclei for a wide range of exciting applications. As an MNE major at VCU, you will study the design and manufacture of machines of all types including vehicles, robots, manufacturing systems, engines, and medical devices. You will also learn how to generate, harvest and convert energy — and develop technologies for medical diagnostics and cancer treatment. Mechanical and nuclear engineers are in continuous demand by industry, as well as the state and federal government. Job opportunities include automotive engineer, aerospace engineer, product design or sales engineer, nuclear engineer and manufacturing processes engineer.





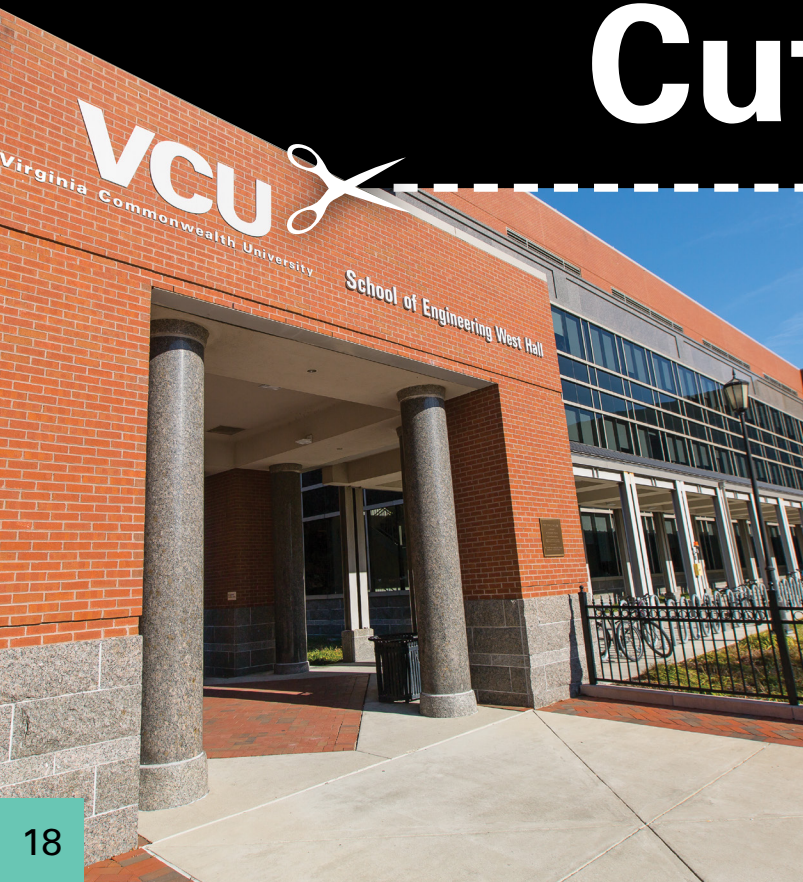


## Engineering West Hall

West Hall is home to the dean's suite, the offices of student services and career services as well as advanced laboratory facilities and sophisticated instrumentation including an atomic force microscope. The Wright Virginia Microelectronics Center has a network analyzer and spectrum analyzer, as well as two cleanrooms for fabrication of nanotechnologies. West Hall is also where you will find VCU's unmanned aerial vehicle lab, the innovation machine shop, and the "ECE Garage," where students make cool projects using 3D printers and other electrical and computer engineering equipment.



# Cutting-Edge Facilities



## Engineering East Hall

VCU just became Virginia's first university to establish a Makerbot® Innovation Center, which resides in East Hall's Mechanical & Nuclear Engineering (MNE) Innovation Lab. East Hall has more than 45 labs that support the Departments of Mechanical & Nuclear Engineering and Computer Science. MNE facilities in East Hall include the Thermal Science Lab, the Solid Mechanics Lab and the Mechatronics Lab, as well as the radiation detection and measurement labs, the VCU nuclear simulator and the VCU fusor. Computer science labs that study natural language processing, quantum computing and intersections with biology are also here.







# IEM

## The Institute for Engineering & Medicine

Constructed in 2009 as an addition to West Hall, the Institute for Engineering & Medicine supports collaborative efforts between engineering, medicine and life science disciplines. The IEM is one of the largest configurable research spaces in the U.S. It features sophisticated instrumentation including scanning electron microscopy. It is also the location of the Nanomaterials Core Characterization Facility (NCC), a material characterization facility that provides high-tech equipment and analytical services to researchers from both VCU campuses and other universities across the East Coast.



# Biotech One

VCU School of Engineering has two facilities in the Virginia Biotechnology Research Park, a dynamic and growing life sciences community that is home to nearly 60 life science companies, research institutes and state/federal laboratories. The Departments of Biomedical Engineering and Mechanical & Nuclear Engineering have offices in Biotech One, a location that fosters meaningful collaboration thanks to the presence of numerous labs and startups.



# Biotech Eight

Biotech Eight, a facility located within the Virginia Biotechnology Research Park, houses VCU's pharmaceutical engineering labs and features specialized instrumentation including nuclear magnetic resonance, gas chromatography mass spectrometry and liquid chromatography mass spectrometry. Biotech Eight is the location of Institute for Engineering & Medicine offices and conference rooms. It features multiple faculty research labs, offices and work areas for graduate students. It also has an artificial heart lab with a mock circulatory loop and flow visualization.





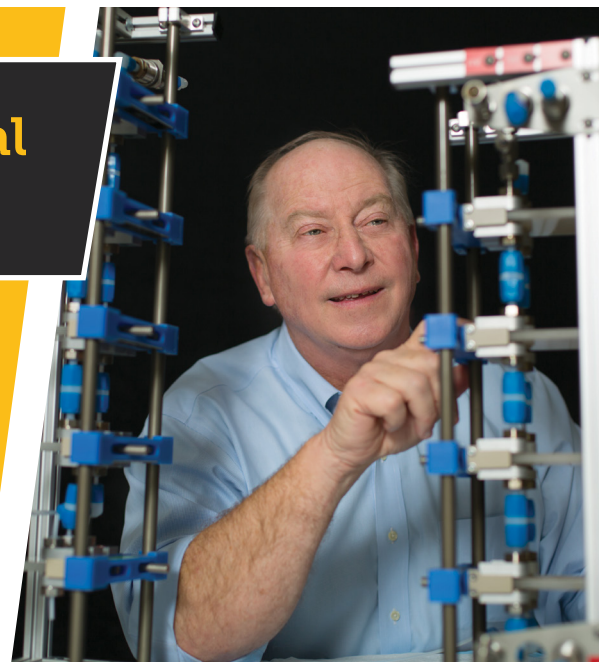
## Sustainable Energy

VCU Engineering is committed to energy solutions for a cleaner, healthier world. We are forging new approaches to power, including major grant-funded projects to develop environmentally friendly lithium-ion batteries for electric vehicles and portable devices. We're also among the leading institutions developing ways to repurpose unused nuclear fuel.



## Pharmaceutical Engineering

We go beyond academia to make discoveries in healthcare a reality. We are achieving important breakthroughs in drug development and commercial production of active pharmaceutical ingredients. With ongoing major grant funding from the Bill & Melinda Gates Foundation and the Clinton Healthcare Access Initiative, we are drastically reducing the costs of active AIDS drug manufacturing.



## Micro/Nano Electronics

With sophisticated facilities such as a class-1000 interdisciplinary cleanroom and a class-1000 microelectronics materials and device laboratory, we are on the cutting-edge of micro- and nano-electronics research. Our research labs are hives of advanced activity in areas including nano-electronics and solid state materials, quantum devices, storage technology and computer architecture and semiconductor optoelectronics.



# Meeting Challenges of the 21st Century

## Machine Data & Learning

VCU researchers are working in areas such as word sense disambiguation and learning algorithms for ultra-large data sets including those on the cloud, clusters, GPUs and grids. We are also on the forefront of bioinformatics, and breaking new ground in modeling and simulation of complex networks with a focus on biological networks and distributed computing.



## Regenerative Medicine

We're driven to improve health with advancements in medicine. Some of our recent discoveries include a method for generating cartilage in vivo without cell transplantation, and a process to enhance bone formation using a roughened titanium alloy surface. We have also developed a new procedure that uses nanotechnology and injectable materials for spinal cord and brain repair.



## Medical Device Design

VCU Engineering is a leader in the artificial heart pump field and has the only lab in the country with a mock circulatory loop system that controls arterial properties to produce realistic cardiovascular conditions. We are also developing resorbable vascular grafts, improved pulmonary drug delivery through aerosol dynamics, machine-based early cancer detection advancements and breakthroughs in soft-surface antimicrobial coatings.





# Student Organizations



**EWB** members designed, installed and worked with students to maintain an aquaponics system at Carver Elementary.



**EGSA** students host many cookouts, mixers and other social gatherings for engineering students of all levels.



**oSTEM** members volunteered at VCU's annual Broad Street Mile.



On an outreach trip to Nicaragua, **EWH** members repaired medical instruments and worked to improve access to healthcare.

© Alexander Kreher & Cody Huff (VCU Photography and Film)

Whether you want to make new friends, polish your skills or build professional connections, VCU School of Engineering has organizations for just about every specialty and interest. These include:

**ENGINEERING GRADUATE STUDENT ASSOCIATION (EGSA)** – Represents the interests and concerns of VCU graduate students in all fields of engineering.

**ENGINEERING STUDENT COUNCIL (ESC)** – Serves as advocacy body for engineering students of all majors in their interactions with the faculty and dean.

**ENGINEERS WITHOUT BORDERS (EWB)** – Creates community-driven, development programs worldwide with a focus on sustainable engineering and responsible leadership.

**ENGINEERING WORLD HEALTH (EWH)** – Applies a multi-tiered approach to healthcare problems in the developing world.

**NATIONAL SOCIETY OF BLACK ENGINEERS (NSBE)** – Works to foster culturally responsible black engineers; welcomes members of all majors and ethnic groups.

**OUT IN SCIENCE, TECHNOLOGY, ENGINEERING AND MATH (oSTEM)** – Educates and fosters leadership for LGBTQA communities in the STEM fields.

**SOCIETY OF WOMEN ENGINEERS (SWE)** – Empowers women to succeed and advance in the engineering field; promotes their contributions and achievements as engineers and leaders.

To learn more about these and other engineering student organizations, visit [go.vcu.edu/egorgs](http://go.vcu.edu/egorgs).



Outstanding faculty members are recognized with awards at the **ESC**'s annual Engineering Student Gala.





# Undergraduate

## **DURI** Dean's Undergraduate Research Initiative

Research is creating new knowledge. At the VCU School of Engineering, you don't have to wait to be on the forefront of discovery. Sophomores and juniors are eligible for research fellowships through the Dean's Undergraduate Research Initiative (DURI). DURI fellows work with graduate student and faculty research mentors to design and execute a yearlong research project. They also get course credit and stipends, as well as funding to present their research at a scientific conference. DURI projects include a 3-D printed electronic prosthetic hand and ex-vivo polymerase chain assembly.



# Research

## **VIP@VCU**

As early as freshman year, you can take your education to the next level with a Vertically Integrated Project (VIP) at the VCU School of Engineering. VIP@VCU allows you to conduct long-term research alongside graduate students and faculty. VCU Engineering became Virginia's only program to join the VIP Consortium in 2015. Since then VIP@VCU teams have produced a skin patch with polymer microneedles for painless injection, better flight control and data payload systems for unmanned aerial vehicles and other future-shaping advancements. What could you and VIP@VCU create together?







From new student orientation to graduation, the Engineering Undergraduate Office of Student Services is here to help.

The Office of Student Services offers a supportive environment and engaging activities that foster student success. We provide one-on-one curriculum advising, coordinate the School of Engineering Tutoring Center, help with skill building and assist with other administrative tasks such as academic appeals and changing your major. In addition, we offer the Fresh Start Program — an interactive lecture series — to new students. Some of the topics presented in this series include: **planning your semester, managing procrastination and goal setting.** Student Services is also responsible for conducting summer and winter new student orientation, hosting the new student welcome cookout and planning both the December and May diploma ceremonies.



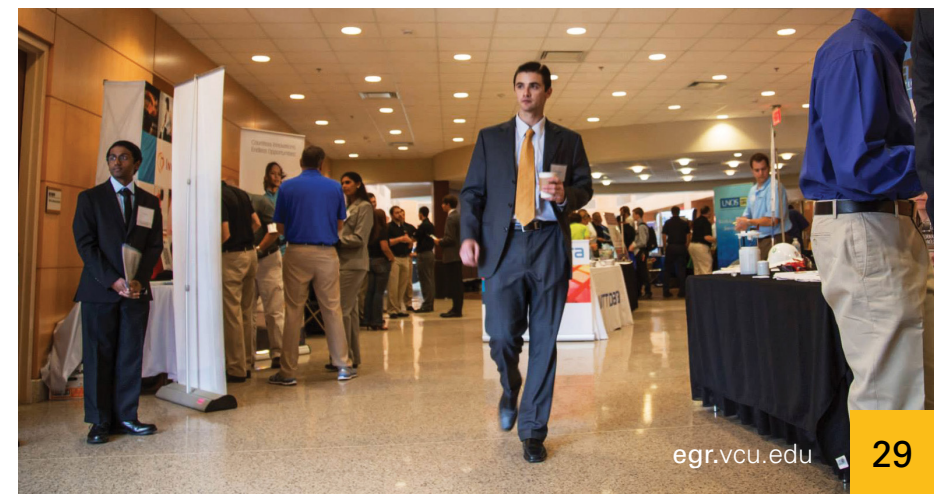
From day one, Engineering Career Services is here to provide support and assistance as you prepare for your life after graduation.

Through career advising and personality assessments, Engineering Career Services will help you explore, prepare and connect.

You will also have multiple opportunities to attend career workshops, resume reviews and mock interviews tailored to the needs and interests of engineering students. And because relationship building is a key to landing the job of your dreams, we make sure that you have opportunities to make connections with organizations that need your engineering skills and knowledge. You will network with employers at internship and career fairs, coffee hours, information sessions, site visits and more!

Visit [egr.vcu.edu/careerservices](http://egr.vcu.edu/careerservices) for the full calendar of events and to search the library of career resources.

# Focus on Student Success







## A Few Companies That Hire Our Students:

- Accenture Federal Services
- Altria
- BMW
- Dominion
- Duke Energy
- Fire Eye
- Google
- Hamilton Beach
- Honeywell
- Leidos
- Newport News Shipbuilding
- Norfolk Naval Shipyard
- Northrop Grumman
- Raytheon
- State and federal government agencies

# Get Hired!

## Experience your future career.

VCU Engineering has robust internship and co-op programs, which give you the chance to experience engineering jobs firsthand. Internships and co-ops are excellent ways for you to gain industry knowledge, accumulate evidence of your abilities and build your professional network. So what's the difference between internships and co-ops?

Internships are scheduled around your classes, typically full-time during the summer or part-time during the school year. A co-op position, however, is a full-time opportunity during the school year. To participate in a co-op, you will work full-time instead of taking classes. As a co-op, you alternate between attending classes as a full-time student one semester and working as a full-time employee the next semester. The number of semesters is determined in advance of co-op employment.

Thanks to co-ops and internships, many VCU Engineering students already have full-time job offers when they graduate.



**Melissa Peskin** (MNE '07)

Since earning her bachelor's degree, Melissa Peskin has developed two patented technologies that help utility companies keep prices and environmental impact low.

“The team-based projects from my VCU Engineering classes were a great experience to prepare me for the small but fast-paced team I work on at Dominion.”

— Melissa Peskin

Peskin, a consulting engineer with Dominion Resources subsidiary Dominion Voltage Inc., received patents in 2010 and 2016 for processes that use smart meter technology to help power companies operate more efficiently without compromising customer's power quality.

Peskin credits many aspects of VCU Engineering with helping prepare her for success.

“I started at Dominion as an intern while attending VCU,” she says. “From the great professors to the collaborative environment to the internship requirement and senior design experience, VCU Engineering got me ready to enter the engineering workforce right after graduation.”

# Alumni Spotlight

**Allen Calderwood** (CS '15)

Allen Calderwood's first job out of college was at Google. He says VCU Engineering prepared him for it — in class and out.

“Most of what preps you for the interview, you learn in the classroom,” says Calderwood of Google's famously challenging real-time coding interview. “And most of the job stuff, you learn outside the classroom.”

VCU Ramhacks and activities with VCU's Association for Computing Machinery organization challenged Calderwood to master skills he learned in class. They also equipped him for the team-based projects he works on today at Google's headquarters in Silicon Valley.

“Study and prepare. Be as impressive as possible,” he says. “Then survey the field and see where you can stand out in the crowd.”

“Ramhacks was a valuable experience. I made something with a team in a time crunch, and helped present our idea to the judges. I learned a lot. It was a good feeling.”

— Allen Calderwood







## DERI

DEAN'S EARLY RESEARCH INITIATIVE

Ready to get inside a state-of-the-art lab and dig into real-world engineering research? The Dean's Early Research Initiative (DERI) is a program that lets you do just that — while you are still in high school. DERI enhances high school students' exposure to engineering through one-year research fellowships. Working in VCU's laboratories with graduate student mentors, DERI fellows work on a research project for a total of 60 hours during the summer. During the following school year, they commute to VCU to work on their research four hours a week. DERI fellows also receive \$200 to attend a local science event or conference; need-based travel stipends are also available. Recent DERI projects include studies on nano-rod magnet growth and characterization, an online framework to determine robustness of biological networks and human-machine interfaces using skin-like electronics. Visit [egr.vcu.edu/deri](http://egr.vcu.edu/deri) to learn more.



## OTHER K-12 OPPORTUNITIES

### LSAMP

LOUIS STOKES ALLIANCE FOR MINORITY PARTICIPATION — Inclusiveness is at the heart of our drive for excellence. VCU LSAMP is committed to enriching all of the STEM fields with talent from traditionally underrepresented groups. We help students open doors and push through glass ceilings with initiatives such as bridge programs, stipends, mentoring, workshops and research experiences.

### RMEP

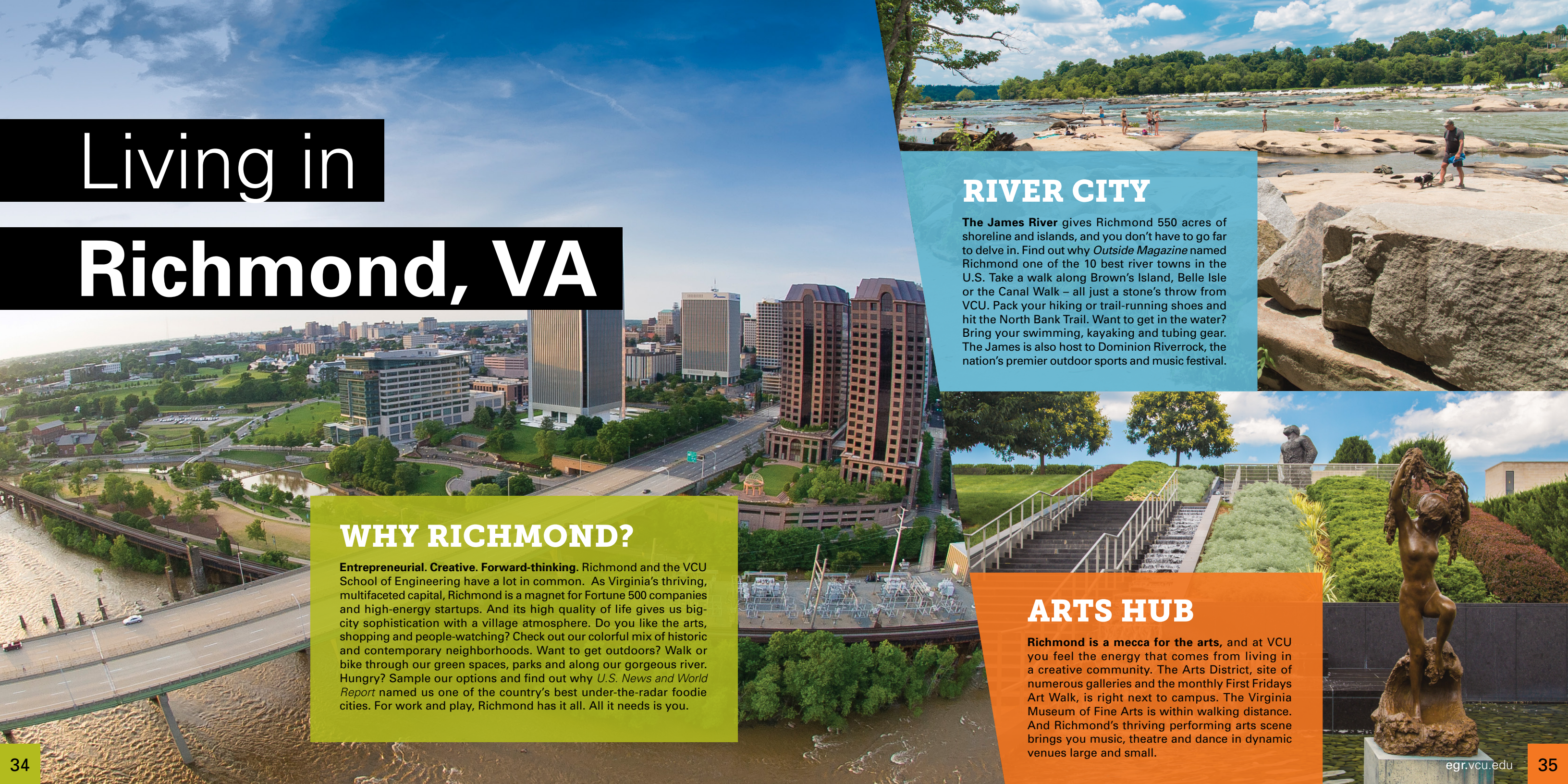
RICHMOND MINORITIES IN ENGINEERING PARTNERSHIP — Engineering students are working to foster the next generation of STEM leaders. RMEP is a non-profit organization that inspires minority middle and high school students to pursue careers in science and engineering. The RMEP Summer Engineering Institute, hosted by students from VCU and Virginia State University, is its signature event.

### ENGINEERS2B

Engineers2B gives high schoolers a glimpse at the life of a VCU engineering student. Teachers can bring their classes for a half-day visit featuring student-guided tours of the engineering campus, lectures, lab experiences and lunch with current students. They leave with a more informed understanding of the college experience from those who know it best: our students.



# Living in Richmond, VA



## RIVER CITY

The James River gives Richmond 550 acres of shoreline and islands, and you don't have to go far to delve in. Find out why *Outside Magazine* named Richmond one of the 10 best river towns in the U.S. Take a walk along Brown's Island, Belle Isle or the Canal Walk – all just a stone's throw from VCU. Pack your hiking or trail-running shoes and hit the North Bank Trail. Want to get in the water? Bring your swimming, kayaking and tubing gear. The James is also host to Dominion Riverrock, the nation's premier outdoor sports and music festival.

## WHY RICHMOND?

**Entrepreneurial. Creative. Forward-thinking.** Richmond and the VCU School of Engineering have a lot in common. As Virginia's thriving, multifaceted capital, Richmond is a magnet for Fortune 500 companies and high-energy startups. And its high quality of life gives us big-city sophistication with a village atmosphere. Do you like the arts, shopping and people-watching? Check out our colorful mix of historic and contemporary neighborhoods. Want to get outdoors? Walk or bike through our green spaces, parks and along our gorgeous river. Hungry? Sample our options and find out why *U.S. News and World Report* named us one of the country's best under-the-radar foodie cities. For work and play, Richmond has it all. All it needs is you.

## ARTS HUB

Richmond is a mecca for the arts, and at VCU you feel the energy that comes from living in a creative community. The Arts District, site of numerous galleries and the monthly First Fridays Art Walk, is right next to campus. The Virginia Museum of Fine Arts is within walking distance. And Richmond's thriving performing arts scene brings you music, theatre and dance in dynamic venues large and small.



# Key

- Education
- Art/Museums
- Food
- Recreation
- Businesses

## Bow Tie Cinema

See new movie releases — within a short biking distance from VCU.



## The Diamond

Watch a baseball game at the home of the Richmond Flying Squirrels.



## Diversity Richmond

Support the Richmond LGBTQ+ community by shopping at Diversity Thrift, playing Diversity Bingo or joining a community discussion.



## Science Museum of Virginia

Boost your scientific knowledge with a variety of exhibits.



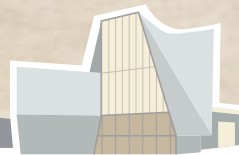
## The Black Sheep

New Southern and Cajun fare — best known for their enormous “battleship” sandwiches.



## Siegel Center

Watch VCU basketball in this 190,000-square-foot facility.



## Virginia Museum of Fine Arts

Check out one of the largest art museums in North America.

## Kuba Kuba

Enjoy authentic Cuban dishes in a quaint atmosphere.



## Institute for Contemporary Art

Coming soon, this will serve as a location for art exhibits as well as a gateway to the University.



## Carytown

Go shopping or eat out at a variety of eclectic stores.



## Byrd Theater

Watch a film for \$2 in this 1928 movie palace.

## The Village Cafe

A go-to restaurant for VCU students; known for serving large portions until 2 a.m.

## School of Engineering

Hopefully you know about this by now.



## RVA On Ice

Go ice-skating under the Richmond skyline (open in winter).



## Virginia State Capitol

This historic landmark, designed by Thomas Jefferson, was a major influence in later government architecture.



## Bottoms Up Pizza

Five-star pizza, made with a thick artisanal crust.

## Shockoe Bottom

Eat at local restaurants, check out art galleries or enjoy Richmond nightlife.



## Maymont

Stroll through the Japanese garden, feed farm animals or tour the Victorian mansion.



North Bank Trail

## Hollywood Cemetery

Visit the graves of historical figures — including former presidents James Monroe and John Tyler.



## Belle Isle

Walk, bike or jog through nature trails, swim, kayak or hop across the river.



## Texas Beach

Walk your dog, hang out by the shore or go swimming in this relaxing river beach.

# What to do in

For more go to [www.visitrichmondva.com](http://www.visitrichmondva.com)

# RVA

## Undergraduate

# 1714

undergraduate students

 **308** biomedical engineering

 **198** chemical & life science engineering

 **274** computer science

 **272** electrical & computer engineering

 **574** mechanical & nuclear engineering

# FACTS & FIGURES

## Graduate

# 271

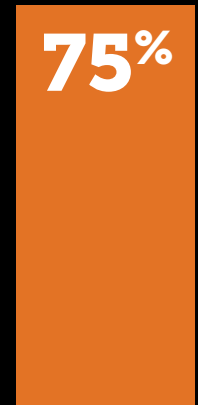
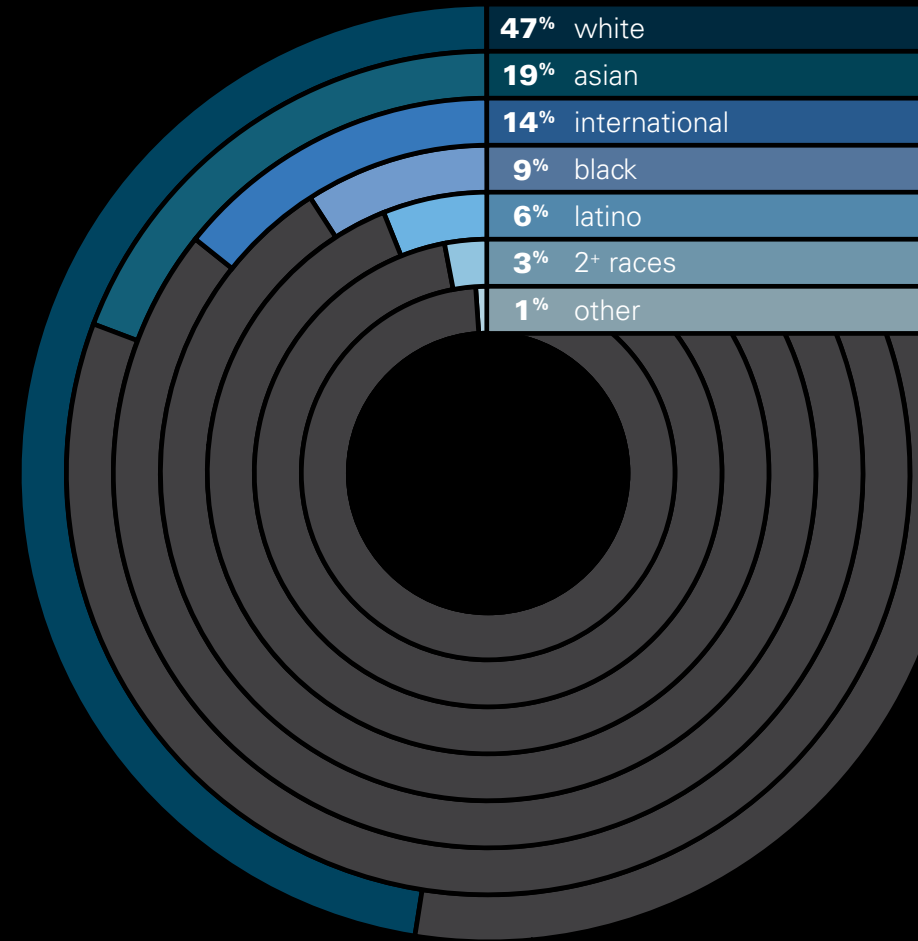
graduate students

**104**  
M.S. students

**167**  
Ph.D. students

Statistics based on data from the 2015-2016 academic year.

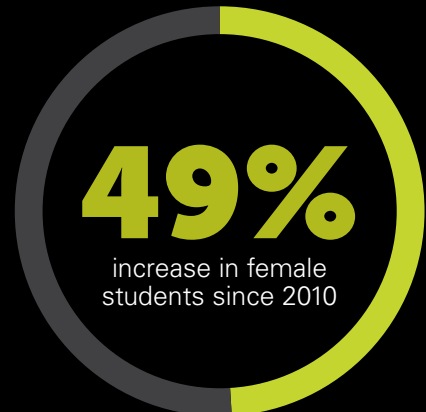
## Student Diversity



male



female



**1248** average admit SAT

**3.95** average admit GPA

**19:1** student to faculty ratio

**23** student organizations





of applicants were accepted.

IN  
**2015** —  
**2016...**

# Next Steps

Visit us online to learn more! [egr.vcu.edu](http://egr.vcu.edu)



**90%** of alumni confirmed employment or grad school within six months.

(represents 69% knowledge rate – calculated from LinkedIn, HireVCURams, survey response data and independent reporting)

## how to apply

Ready to make it official? Review our admission requirements online at [go.vcu.edu/egradmissions](http://go.vcu.edu/egradmissions).

You can also apply online at [go.vcu.edu/egrapplynow](http://go.vcu.edu/egrapplynow).

## visit us!

You've had a chance to learn about VCU Engineering's programs and community. But there's nothing like being here to experience our culture of innovation. See the VCU Engineering difference in person at one of our daily information sessions and/or campus tours. Are your friends or classmates also considering VCU Engineering? Let us design a group visit aligned with your interests. You can also see VCU Engineering at work by attending one of our larger events such as an Open House, the FIRST Robotics Competition or the Senior Capstone Expo. You've met us. We'd love to meet you. Explore ways to connect at [go.vcu.edu/egrvisit](http://go.vcu.edu/egrvisit).

**\$600,000+**

in scholarship money was awarded to students.

**140+**

undergraduate students received scholarships.



# From the Dean



## **When I walk through VCU's School of Engineering, I see the kind of people I've always wanted to hire into my labs and companies.**

VCU engineers are whole-brain thinkers who know how to take hold of a problem and craft a solution that is both scientific and creative. They want to live in a bigger world and use their skills to make it better. And VCU engineers are people looking to work with other smart people to build something great. As a scientist and entrepreneur, I know these are the people who make things happen.

Are you that kind of person? The fact that you're exploring VCU indicates you might be.

When you come to the VCU School of Engineering, you immediately feel the high level of energy and inspiration at work here. It comes in large part from our public-private partnerships, which have been the foundation of the program since its inception in 1996. Government organizations and major industries surround our campus, our city and the region. They know that they can say "we need something," and VCU Engineering will respond with brilliant minds and expert faculty.

VCU's culture of collaboration means students don't have to wait to conduct real-world research or work alongside industry leaders. We are one of just 20 universities nationwide, and the only school in Virginia, in the prestigious Vertically Integrated Projects (VIP) Consortium. VIP@VCU gives undergraduate engineering students opportunities to work with graduate students and faculty on innovative, large-scale research projects. VCU's robust co-op and internship programs provide students paid engineering experience and expanding professional networks - while they are still in school.

VCU's motto is "Make it Real." Our students are doing that every day, through learning experiences that are rooted in - and have impact on - the real world. You've had a chance to learn more about our departments, students and specialities. Now I hope you will come and experience the VCU difference in person. You'll interact with students from a world of backgrounds. You'll meet faculty members with international reputations and love for student learning. And you'll feel the synergy of a cutting-edge engineering program that lives in a vibrant community filled with cultural richness and natural beauty.

VCU offers a discovery-based education. What will you discover here? How will you make it real?

Why not visit and find out? At VCU, we are building the future now. Go Rams!

A handwritten signature in black ink that reads "Barbara D. Boyan".

— **Barbara D. Boyan, Ph.D.**

Dean, VCU School of Engineering  
Alice T. and William H. Goodwin, Jr. Chair  
in Biomedical Engineering



**VCU** School of Engineering

VIRGINIA COMMONWEALTH UNIVERSITY



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