NUCLEAR Engineering

We offer nuclear engineering as a concentration focused on the study and application of the properties of atomic nuclei and their reactions in areas such as energy production, industrial quality control, medical diagnostics or cancer treatment.

Explore important topics that include:

- Environmental sustainability
- Nuclear physics
- Radiation technology
- Advanced energy systems
- Power generation

VCU College of Engineering

MECHANICAL & NUCLEAR Engineering

In the heart of RICHMOND

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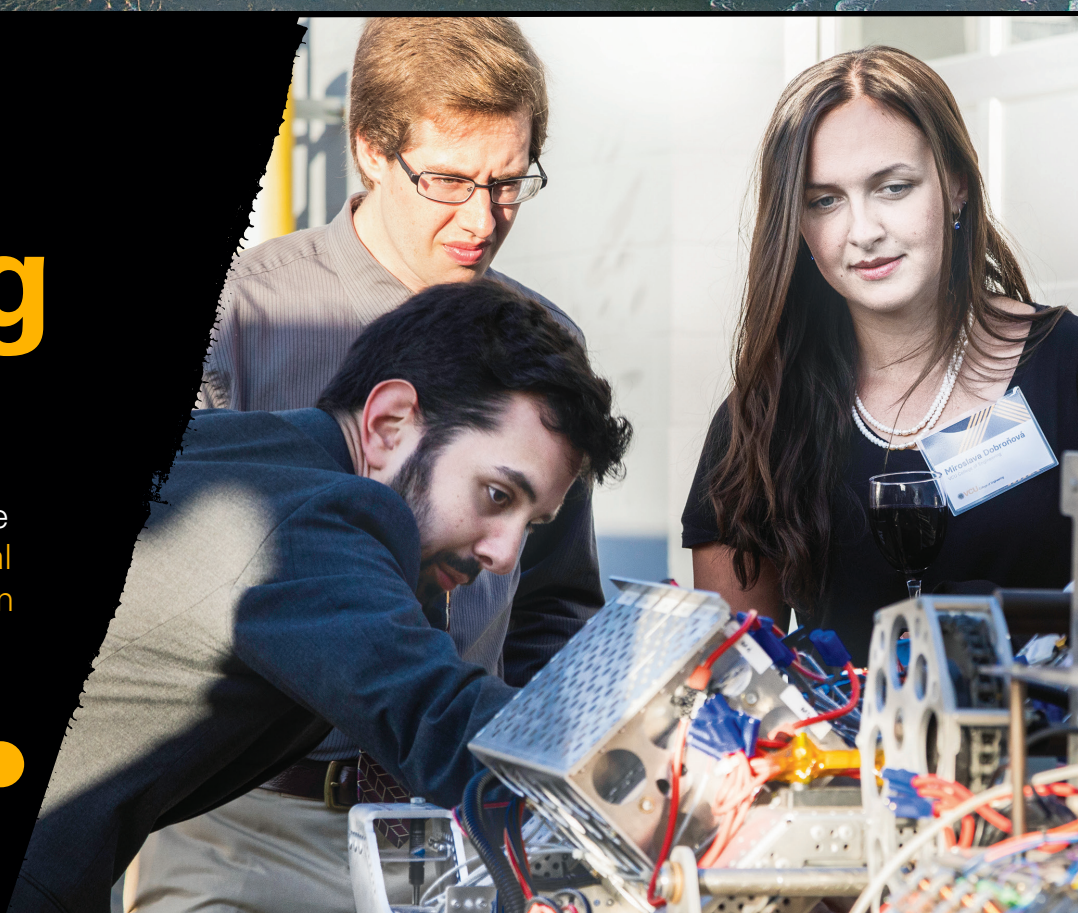
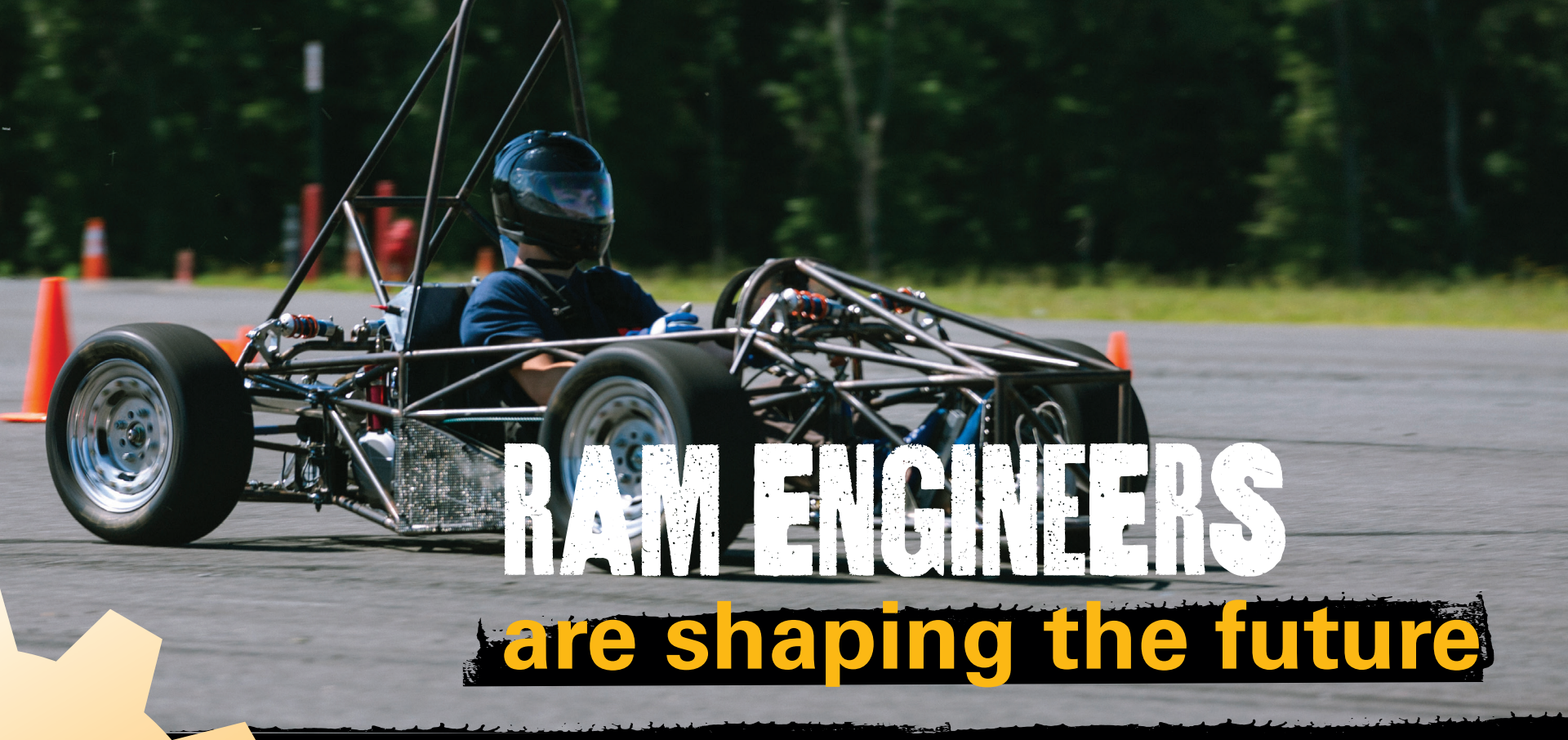
MECHANICAL Engineering



One of the broadest engineering disciplines, mechanical engineering applies the principles of engineering, material science, physics and mathematics to design, analyze and manufacture mechanical systems such as vehicles, biomedical devices, consumer products, internal combustion engines and robotic systems — to name a few.

Study areas include:

- Additive Manufacturing
- Computer-Aided Design
- Mechatronics
- Thermal Fluid Systems



RAM ENGINEERS are shaping the future

From applying material science to additive manufacturing techniques to optimizing coolant systems for nuclear reactors and more, mechanical and nuclear engineering students gain understanding of many important engineering topics.

B.S. in Mechanical Engineering
The Bachelor of Science in Mechanical Engineering allows you to develop expertise in key areas like: CAD, engineering graphics and materials, mechanical systems, mechatronics, aerospace engineering and manufacturing.

Nuclear engineering concentration
The Bachelor of Science in Mechanical Engineering with a concentration in nuclear engineering allows you to specialize your education and key areas of nuclear engineering fundamentals, nuclear fuel cycle and economics, nuclear power plants and radiation safety and shielding.

Access to learning spaces equipped with industry-strength tools allow you to apply the theoretical knowledge from lectures in practical, real-world lab environments.

These spaces include the Radiation Detection and Measurement Lab, Thermal Science Lab, Mechatronics Lab, Nuclear Reactor Simulator and the Maker Garage and Studio.

Your first job won't be your first job

Your journey at the College of Engineering moves you toward an engineering career. With internships, co-op experiences, lab opportunities and more, you'll have many opportunities to work with employers before graduation, developing an understanding for the kind of work you enjoy and building a network of relationships for the foundation of your career.

These opportunities include:

Cooperative Education

Work a full-time engineering job while maintaining student status. Get paid, learn valuable industry knowledge and grow your professional network.

Internships

Apply what you learn in the classroom in a professional setting to gain valuable practical experience.

Student Organizations

Find like-minded students with a passion for mechanical and nuclear engineering.

Vertically Integrated Projects (VIP)

Get school credit while leading and contributing to large-scale, multi-year research.

Looking to the future

Mechanical and nuclear engineering students find success in a variety of industries and our graduates work at companies like:

- Lockheed Martin
- Dominion Energy
- Norfolk Naval Shipyard
- The Boeing Company
- M.C. Dean
- DuPont
- Huntington Ingalls Industries