



THE OHIO STATE UNIVERSITY

COLLEGE OF ENGINEERING



**WILL IT
BE YOU?**

SOMEONE WILL...

work on the world's fastest electric car... adapt toys for special needs children... advance life-saving research in blood substitutes, cancer diagnostics, heart attack treatments and more... participate in the fastest growing student hackathon in the country... develop and build solutions for underserved communities around the world... work directly with industry to design new and improved products... inspire the next generation as a K-12 camp volunteer... enjoy the benefits of a worldwide network of over 55,000 engineering alumni.

WILL IT BE YOU?

WHY OHIO STATE?

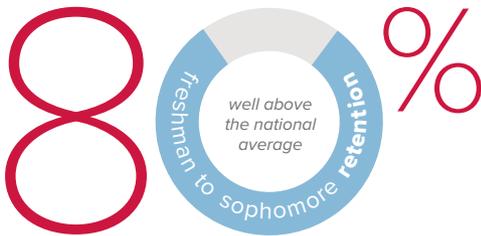
Since The Ohio State University was born in 1870, engineering has been central to its land grant mission. Then and now, Buckeye Engineers make the world a better place. Ohio State Engineering is where education, discovery and economic development collaborate to innovate.

RANKINGS

#1 ENGINEERING PROGRAM IN OHIO
and among the top 20 U.S. public universities.



STUDENT SUCCESS



RESEARCH

40+ RESEARCH CENTERS AND LABORATORIES
with state-of-the-art facilities



FACULTY ACCOLADES

NATIONALLY RECOGNIZED
first-year engineering program



CONNECTION TO CAREERS

1,500+ EMPLOYERS
in our internal career database



ALUMNI NETWORK



LIVING ENGINEERING ALUMNI WORLDWIDE

YOUR POSSIBILITIES ARE LIMITLESS

For engineering students at Ohio State, the curriculum goes beyond lectures, beginning with a hands-on course sequence designed specifically for first-year students. You will be engaged in labs and classes—more than 1,500 to choose from—taught by faculty members. An emphasis on team-based and experiential learning, from first-year projects through senior capstones, will enable you to create an engineering curriculum that fits your academic and career goals.

PERSONAL ATTENTION AND SUPPORT

Our award-winning faculty and academic advising staff gladly offer valuable experience and knowledge of the engineering discipline and curriculum. Diverse faculty teach in state-of-the-art laboratories. Our advisors are professionals with advanced degrees, and average more than a decade of personally working with college students.

A DEGREE OF DISTINCTION

For more than 20 years, *U.S. News & World Report's* edition of “America’s Best Colleges” has consistently ranked Ohio State as the top engineering program in Ohio and among the top 20 public university programs in the U.S. Our engineering graduates accept positions at leading companies across the country including Honda, General Electric and Google. Buckeye engineers also have earned advanced degrees at prestigious graduate programs, including MIT, Johns Hopkins and Stanford.

BIG SCHOOL OPPORTUNITIES, SMALL SCHOOL FEEL

At Ohio State, you’ll have all the advantages of a big school situated on three easy-walking blocks of campus with a 26:1 student-faculty ratio. And 90 percent of engineering classes will be with 50 students or less—rivaling less expansive, but more expensive schools.

A COMPETITIVE EDGE CLOSE BY OR ABROAD

You’ll have an opportunity to build a broad portfolio that includes real-world experience. More than 1,500 companies work through the Engineering Career Services Office to recruit interns and future employees. Our engineering students also have an opportunity to take their problem-solving skills abroad, choosing from more than 30 countries. Buckeye engineers graduate with the real-world experience attractive to recruiters.

A GLOBAL NETWORK

Ohio State’s engineering graduates join a tremendous network of successful, influential and distinguished College of Engineering alumni. There are more than 55,000 living engineering alumni around the world, with many of them working at top organizations like GE Aviation, Microsoft, Johnson & Johnson, NASA, Ford, Disney and Shell Oil Company, just to name a few! Many engineering alumni return annually to recruit the next generation of Buckeye engineers into their companies.





"My experience at Ohio State is one of many. Academically, I learned about the fields of engineering and their career paths, leading me to pursue my passion in industrial engineering. Professionally, Engineering Career Services enabled me to secure four internships before graduation, which helped me gain experience and determine what I wanted to do with my degree. The Minority Engineering Program introduced me to the National Society of Black Engineers, an organization that provided academic and professional support, and a great group of friends. I will never forget my time and friends at Ohio State."

JEREMIAH ROSS, Alumnus, '16

ENGAGE IN A RICH ACADEMIC ENVIRONMENT

Explore our majors, find your fit – learn more about our majors at go.osu.edu/engmajors

Aerospace Engineering prepares students to design, produce, and investigate aircraft, spacecraft and drones. This major also has many earth-bound applications, from cars to golf balls.

Aviation Engineering lifts students towards careers in piloting, aviation management, transportation, economics and logistics, flight operations and flight support.

Biomedical Engineering combines engineering expertise with biological, chemical, and mathematical sciences to solve problems in health and wellness.

Chemical Engineering plays an integral role in producing pharmaceuticals, fuel sources, household cleaners, and even cosmetics.

Civil Engineering focuses on planning, designing, building, and operating the infrastructure and systems essential to our society.

Computer Science and Engineering includes the design and analysis of algorithms, data structures, programming languages, software, computer architecture, artificial intelligence and graphics.

Electrical and Computer Engineering uses electricity and computer systems to create new technology to improve people's lives, such as wireless communications, lasers, semiconductors, and sustainable energy and power systems.

Engineering Physics combines the fundamentals of engineering with a deeper understanding of mathematical and scientific principles.

Environmental Engineering teaches students to analyze, design and develop solutions and systems to protect the environment from the negative effects of human activity.

Food, Agricultural and Biological Engineering includes the production and processing of food, biological products and ecological systems, in addition to advancing the field of precision agriculture.

Industrial and Systems Engineering encompasses analyzing, optimizing and designing advanced systems that include machines, people, software, materials and energy.

Materials Science and Engineering focuses on the relationships among the processing, structure, properties and performance of six major classes of materials: metals; ceramics; polymers; composites; semiconductors; and biomaterials.

Mechanical Engineering involves the creative design, manufacturing, testing, evaluation and distribution of devices both large and small, from cars and power plants to artificial organs and nanomachines.

Welding Engineering employs science and engineering in joining components made of metals, ceramics, plastics and other materials.



“WHERE YOU FALL
IN LOVE WITH
ENGINEERING,
MEET PEOPLE WHO
SUPPORT YOU
FROM START TO
FINISH, AND MAKE
FRIENDS THAT LAST
A LIFETIME...THAT’S
OHIO STATE”

ANILA

Materials Science and
Engineering Student

FIRST-YEAR ENGINEERING PROGRAM

Our nationally ranked first-year engineering program enables you to take engineering coursework during your first semester and acquire valuable skills when looking for a job or internship. You will explore the wide variety of engineering fields through multiple hands-on labs and a semester long design-build project. Meanwhile, you will strengthen communications, problem solving, and teamwork skills, which will translate from success in the classroom to success in your career.

All Buckeye engineers enroll in the Pre-Major Program, beginning with math, science, and engineering courses that are foundational to the majors. Upon completion of your pre-major classes, you will submit an application to your major program of choice.



HELP FINDING THE RIGHT FIT

Our academic advisors are here to help you make the most of your academic experience, supporting you in:

- exploring majors and related careers
- discussing concerns and creating strategies to improve academic performance
- connecting with academic resources on campus
- integrating degree requirements and co-curricular opportunities into your college career
- reviewing Ohio State policies and procedures affecting your coursework, enrollment, academic standing, and progress toward graduation

“From first-year engineering to senior capstone design, students in the College of Engineering gain practical, hands-on experience through project-based design courses. Students have opportunities to strengthen their leadership, teamwork, communication and prototyping skills which allows them to be marketable in today’s competitive world.”



LISA ABRAMS
Associate Chair, Department of Engineering Education

BEYOND THE FIRST YEAR

Engineering faculty and staff prepare students for innovative and rewarding careers through experiential learning. Hands-on labs are woven throughout the curriculum, which means Buckeye engineers are exposed to real-world problems. Every student concludes his or her coursework with a senior capstone project, enabling them to contribute their area of expertise to a product or solution while engaging with company liaisons, collaborating with students of other disciplines, and receiving faculty coaching.



“Diversity drives innovation and creativity, enabling engineers to solve complex problems. Actively engaging diversity and inclusion prepares students to be informed citizens, who can live, work and contribute anywhere in the world.”

DONNIE PERKINS, Chief Diversity Officer

INNOVATION THROUGH DIVERSITY

At Ohio State, we recognize that diversity enhances critical thinking, strengthens problem solving and prepares students for success in our global world. That is why we have a team of 15 Diversity Outreach and Inclusion staff committed to increasing diversity and advancing inclusive excellence. Through College of Engineering initiatives, you will have the opportunity to network, learn and develop with experiences rich in diversity.

The Women in Engineering Program (WiE) and **Minority Engineering Program (MEP)** offer networking, academic and professional counseling, skill building, workshops, tutoring, mentoring, financial aid and career exploration. Through these programs, students also have the opportunity to participate in the Engineering House Learning Community.

Diversity, Outreach, and Inclusion Retention and Student Success provides initiatives to advance women and underrepresented minority engineering students' study and problem solving skills. Students receive academic coaching and opportunities for career development in both industrial and academic pathways.

LEARN FROM SOME OF THE BRIGHTEST MINDS IN THE WORLD

The College of Engineering is home to 12 departments and more than 25 research centers, where undergraduate students learn, research and connect with expert faculty from around the world. Our departments support students from day one through advising and teaching, scholarship support, undergraduate research, mentoring and networking opportunities. At Ohio State, you will engage with faculty from academic, research, and industry backgrounds, providing you a diverse educational foundation.

“Engineering is a practice profession, like nursing and teaching, you can’t learn it all from a textbook. For that reason, I try to bring as much real world practice into the classroom as possible. This might be through students having industry mentors, to practicing professionals sharing their approaches in the class, to sharing my previous experience. It is vital to relate what students are learning to their future environments, which gives problems context and thus help them learn better.”



AIMEE ULSTAD
Clinical Associate Professor,
Department of Integrated Systems Engineering

“FACULTY WANT YOU TO
LOVE WHAT THEY ARE
TEACHING AS MUCH AS
THEY LOVE IT.”

JIM

Welding Engineering Student



CREATE YOUR OWN COLLEGE EXPERIENCE

Throughout your time at Ohio State, you will explore real-world opportunities that will lead to your success, both inside and outside of the classroom. Buckeye engineers can participate in our co-op and internship program, undergraduate research, honors and scholars programs, education abroad and engineering project teams. You'll have plenty of choices and opportunities to find your calling, reach your goals and pursue a fulfilling career.

LAUNCH YOUR CAREER

Engineering Career Services (ECS) offers individualized expert advice through resume review, job search consultation, and assistance with preparing for on-campus interview and recruiting events. ECS connects our students with relevant and rewarding co-ops or internships and full-time career opportunities.

go.osu.edu/careerengr

Services and Support

- Workshops on resume writing, job search strategies, interviewing tips, job offer negotiations and more
- Engineering Career Fairs twice annually
- Engineering Job Shadow Program
- Company database featuring 1,500+ employers
- Individual career coaching

Co-ops and Internships

- Both co-ops and internships are paid, career-related opportunities that allow students to gain real-world experiences in their chosen field prior to graduation.
- Engineering Co-op and Internship Program designed to support students in their career development and job search. Its benefits can be summed up as the Three C's: Choice, Connections, and Career management for life.

Top Employers

- Accenture
- Boeing
- Eaton
- General Electric
- General Mills
- Honda
- IBM
- Marathon Petroleum
- Microsoft
- Procter & Gamble
- Whirlpool



GRANT

HOMETOWN:

Avon Lake, Ohio

MAJOR:

Mechanical Engineering

MINOR:

General Business

WORK EXPERIENCE:

Ernst & Young, Caterpillar & Danco Metal Products

ACTIVITIES ON CAMPUS:

- Buckeye Undergraduate Consulting Club
- Sigma Phi Epsilon Fraternity
- Integrated Business and Engineering (IBE)
- Fisher Industry Clusters Program
- Consumer Packaged Goods (CPG)
- Bucket and Dipper Junior Class Honorary

“ECS excels in preparing students for the professional world and connecting them with companies seeking Buckeye engineers. The internships that I’ve obtained through ECS have been phenomenal and their staff has been instrumental in my preparation and professional development.”





THE OHIO STATE
UNIVERSITY
COLLEGE OF ENGINEERING

HOMETOWN:

North Hollywood, CA

MAJOR:

Aerospace Engineering

UNDERGRADUATE RESEARCH:

- FAA Linear LED Lighting for Airport Centerline Turnoffs
- Target Tracking with Autonomous Robot-Sensor Network for Space Applications
- FAA Global Alignment within Air Traffic Controller Training
- NASA Space Medicine Research working with Muscle Atrophy in microgravity
- Temperature Analysis on LED Airport Lighting

ACTIVITIES ON CAMPUS:

- Society of Hispanic Professional Engineers
- Engineering Ambassador
- Society for the Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS)
- Buckeye Space Launch Initiative (BSLI)

“Engineering research has allowed me to explore and discover new ways to develop, design, and implement possible answers to unknown problems. I have received a national diversity research award, networked with world-renowned researchers, and decided to pursue a PhD in Aerospace Engineering.”



SOLVE SOCIETY'S CHALLENGES THROUGH RESEARCH

At Ohio State, engineers conduct research with doctors, physicists, designers, artists and experts in many other fields. Engineering undergraduate students are encouraged to participate in the wide array of opportunities generated by our faculty. Students enjoy multiple outlets to share their work including Ohio State's annual Denman Undergraduate Research Forum each spring.

Benefits of undergraduate research:

- Help solve the world's greatest challenges
- Access to world-class facilities, equipment and mentors
- Work alongside faculty and graduate students
- Early exposure to engineering (can start research in first year!)

KATE

HOMETOWN:

Plymouth, Wisconsin

MAJOR:

Ecological
Engineering

STUDY ABROAD:

Sustainable Urban Development in
European Cities

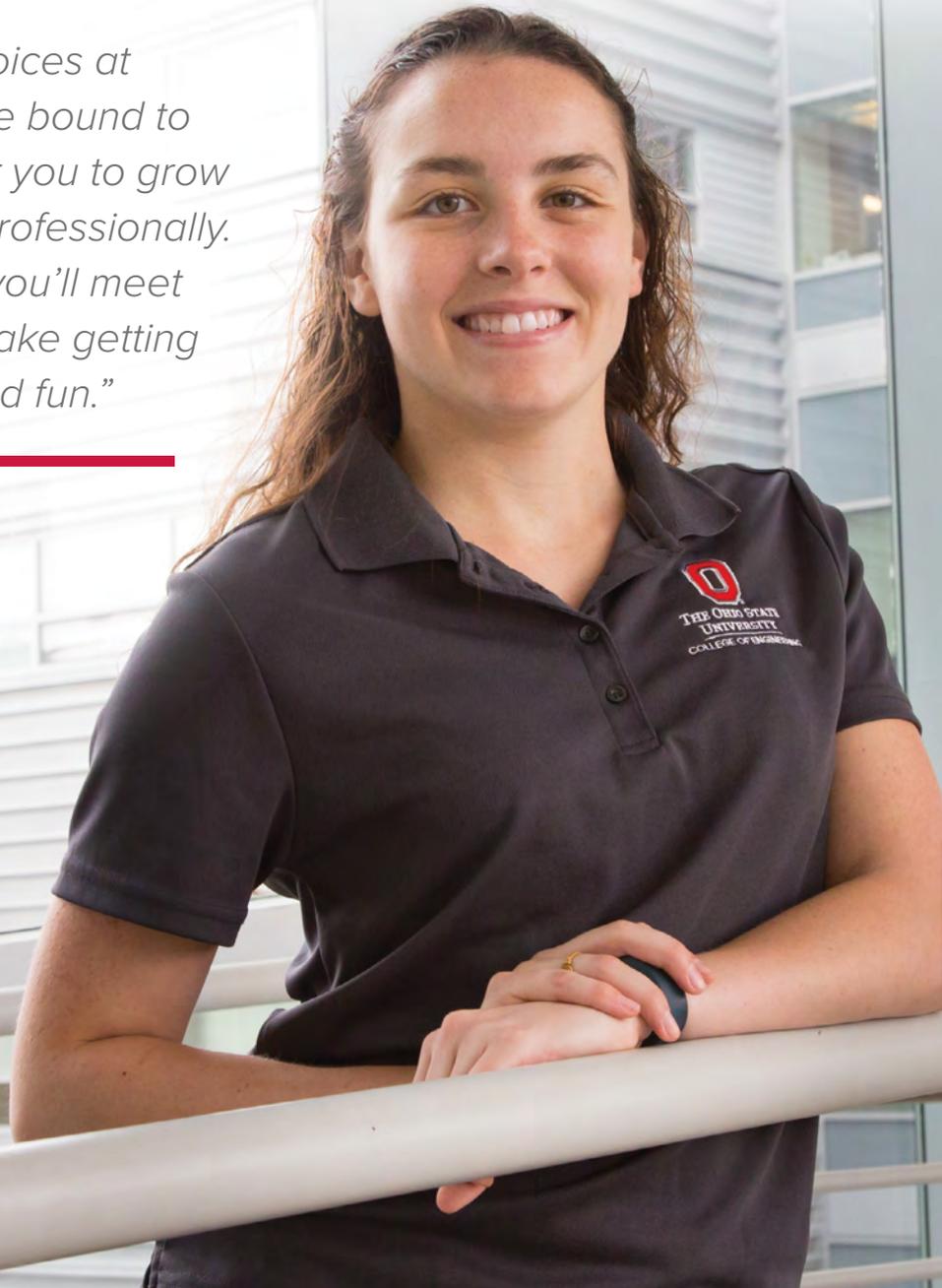
WORK EXPERIENCE:

- USDA Natural Resource (Soil) Conservation Service Pathways Intern
- Ohio EPA Division of Air Pollution Control SIP Intern

ACTIVITIES ON CAMPUS:

- Green Engineering Scholar
- Phi Sigma Rho - Sorority for Women in Engineering, VP Social Relations
- Office of Diversity and Inclusion Morrill Scholar

“With so many choices at Ohio State, you’re bound to find a great fit for you to grow personally and professionally. Plus the people you’ll meet along the way make getting involved easy and fun.”



ENGINEER INNOVATIONS ACROSS THE GLOBE

Education abroad offers students the opportunity to experience the global perspective of the engineering discipline. Buckeye engineers have a variety of programs to enhance their global competencies, which serves them well both on and off campus as they strive to find solutions to the world's diverse engineering problems.

go.osu.edu/globalengr

- Global Option in Engineering Program (GO ENGR)
- International Engineering Service-Learning (SL) Program
- Engineering-Specific Education Abroad Programs
- Student exchange opportunities at foreign universities
- International internships
- Humanitarian engineering missions

ENHANCE LEADERSHIP THROUGH STUDENT INVOLVEMENT

Ohio State emphasizes the value of student involvement and offers more than 1,000 student-led clubs and organizations. Within engineering alone, there are more than 100 professional organizations, clubs and project teams to choose from, including the national champion EcoCAR Team, National Society of Black Engineers, and Engineering for Community Service (ECOS).

go.osu.edu/teamengr

FOSTER PASSION THROUGH COMMUNITY

Ohio State's Scholars Program offers students the chance to live and learn with like-minded classmates who share similar interests. Each of the Scholars programs revolves around a unique theme, ranging from academic and professional pursuits to critical issues and leadership development.

go.osu.edu/scholarsengr

- Green Engineering Scholars encourages the exploration of innovation and technological development within the context of green engineering and social responsibility, while providing students with opportunities to explore career options.
- Humanitarian Engineering Scholars focuses on the themes of service-learning and social responsibility. Humanitarian Engineering is the research, design, and constrained implementation of technology to directly improve the well-being and meet the needs of an underserved community.

Honors students have the opportunity to enhance their intellectual and personal development through an enriched academic experience and integration of curricular and co-curricular programming. Engineering students enrolled in the University Honors program can choose to participate in the optional Fundamentals of Engineering for Honors (FEH) Program. FEH provides accelerated engineering classes throughout the first year and provides a community of engineering honors students.

go.osu.edu/honorsengr

WILL IT BE YOU?

The opportunities to develop as a professional engineer and as a person are endless at Ohio State. You have the potential to change the world for the better. Even if it's not here, we hope you find the place to realize that potential.

**WANT TO VISIT THE
COLLEGE OF ENGINEERING?**

go.osu.edu/visitengr

**WHAT DOES THE FIRST YEAR
CURRICULUM LOOK LIKE?**

go.osu.edu/overviewengr

**NEED TO TRANSFER CREDIT
TO OHIO STATE?**

go.osu.edu/creditengr

**ADDITIONAL QUESTIONS? CONTACT OUR
UNDERGRADUATE RECRUITMENT TEAM**

eng-recruitment@osu.edu

614-247-7697



THE OHIO STATE UNIVERSITY

COLLEGE OF ENGINEERING

 engineering.osu.edu  facebook.com/OSUengineering

 twitter.com/OSUengineering  go.osu.edu/COEin