ENGINEERING DETROIT
LEARN MORE IN A CITY THAT INSPIRES

WAYNE STATE
COLLEGE of ENGINEERING
Once home to fearless pioneers like Charles Lindbergh, Detroit has led the world in engineering marvels. From Henry Ford’s automated assembly line to the world’s first successful open heart surgery — made possible by a mechanical heart pump developed at WSU — inventions born in our city have forever changed life around the globe.

Wayne State University, Michigan’s only urban research university, has anchored Detroit’s vibrant Midtown area for more than a century. We’re surrounded by major institutions representing industry and health care, and longstanding partnerships with these high-profile neighbors mean a plethora of opportunities and resources for our students in pivotal fields like alternative energy technology, biomedical engineering and sustainability.

But we’re not all work and no play. City life is fun and inspiring. Within a short walk of campus you’ll find dozens of museums, theatres and music venues ranging from the nationally known to the quietly hip. Add to that unique world cuisine from countless eateries, championship sports teams and safe, affordable living options, and you’ve got the ideal place to prepare for your future.

“I’m happy and proud to call Detroit my home. I’m excited to be in the midst of this urban revival, and more students are moving close to campus to be part of it too.”

— Michelle Marinich Rogers, civil and environmental engineering
Set in the heart of the Motor City, it’s no wonder Wayne State is a leader in automotive advancements. Always pushing forward, we launched the nation’s first degree programs in alternative energy and electric-drive vehicle engineering. We also are a partner in the National Biofuels Energy Lab, accelerating research and development of alternative fuel sources and reducing U.S. dependence on foreign oil.

Our professors and students are frequently sponsored by major carmakers to research everything from clean energy systems to sophisticated safety features and beyond. Wayne State’s student-run Warrior Racing team recently exhibited its homemade formula race car at the world premier of the North American International Auto Show, one of Detroit’s most acclaimed annual events. And WSU was one of 15 North American universities chosen to participate in EcoCAR 2, a student research competition established by the U.S. Department of Energy and General Motors to advance automotive propulsion technology and energy efficiency.
Wayne State’s College of Engineering has a longstanding relationship with the university’s School of Medicine, as well as the major hospital systems in our backyard. These institutions support our biomedical engineering program with unsurpassed medical facilities and pioneering researchers. Here interdisciplinary work is encouraged, resulting in inspired ideas and creative outcomes.

Our faculty members are consistently in the limelight for their discoveries. Take Cynthia Bir, a professor of biomedical engineering who has been tapped as an expert for Discovery Channel specials and won Emmys for her work as lead scientist on *ESPN Sport Science*. Even our first-year students get in on the action. A team of freshmen recently placed second internationally in a design competition for their device that allows a diabetic patient with the use of only one arm to test his blood sugar independently.

**WE WORK INSIDE:**

- Detroit Medical Center
- Henry Ford Health System
- John D. Dingell VA Medical Center
- Karmanos Cancer Institute
- Kresge Eye Institute
Don’t let our urban landscape fool you. Detroit is green all over, and Wayne State is cultivating major initiatives citywide. For instance, a team of intrepid Wayne State engineering students helped the city’s popular People Mover go green. The group proactively researched and recommended green roof options for the light-rail system’s Joe Louis Arena station, a project implemented with great success.

Detroit is teeming with urban gardens, which are cropping up in increasing numbers, providing fruits and vegetables — and a sense of accomplishment — to city dwellers. However, as the farming trend grows, so have concerns over contaminants like lead and arsenic found in urban environments. Our engineering students and faculty are stepping in, armed with research to help Detroiters build safe and sustainable natural food sources.

Professor Carol Miller is using her expertise to improve the health of the world’s largest freshwater resource. With a $1.48 million grant from the Great Lakes Protection Fund, she is working to reduce the amount of energy used when water is sent into people’s homes, cutting down on air and water pollution and reducing our impact on wildlife.
There is no better way to prepare for a career in engineering than to work in the field, and hundreds of internship experiences are available for students in the city at large and neighboring areas. Opportunities are available at TechTown, Wayne State’s on-campus business incubator, and our engineering students frequently intern at local powerhouses ranging from General Electric to General Motors, Toyota to Takata, and everywhere in between.

Wayne State engineering alumni are hard at work all over Detroit and Southeast Michigan. Our graduates have a line into a wide variety of employers thanks to our vast alumni network and collaborative industry partnerships. Of course, it helps that Wayne State is well known for our innovative research and career-ready graduates. The Career Services Office stands ready to help you find work at companies near and far, and provides assistance with résumé and cover letter writing, salary and employer information and much more.

“The people we want to hire here at Urban Science are math – and engineering-based graduates with a problem-solving and creative spirit, and we can tap into a great pool of that talent from Wayne State.”

— Jim Anderson, founder, president and CEO of Urban Science and WSU College of Engineering alumnus
Gain experience, connect with area employers and alumni, and receive support from our numerous student chapter organizations:

- American Institute of Chemical Engineers (AIChE)
- American Society of Civil Engineers (ASCE)
- American Society of Mechanical Engineers (ASME)
- Association for Computing Machinery (ACM)
- Biomedical Engineering Society (BMES)
- Collegiate Entrepreneurship Organization (CEO)
- EcoCAR 2
- Engineering Student Faculty Board (ESFB)
- Engineering Technology Student Organization (ETSO)
- Formula SAE
- Institute of Electrical and Electronics Engineers (IEEE)
- Institute of Industrial Engineers (IIE)
- National Society of Black Engineers (NSBE)
- Society of Hispanic Professional Engineers (SHPE)
- Society of Women Engineers (SWE)
- Tau Beta Pi (TBP)

In addition, area professional engineering societies and organizations provide even more opportunities for networking and support:

- Associated Soil and Foundation Engineers (ASFE)
- Engineering Society of Detroit (ESD)
- Institute of Industrial Engineers (IIE) – Greater Detroit Chapter
- Michigan Society of Professional Engineers (MSPE)
- National Society of Professional Engineers (NSPE)
- Society of Hispanic Professional Engineers (SHPE) – Detroit
- Society of Women Engineers (SWE) – Detroit Section
When it’s time to unwind, Wayne State students don’t have far to go. Our neighborhood offers a lot of choices: restaurants from the exotic to the everyday, friendly pubs, unique shops, first-class entertainment venues and championship sports.

Wayne State and its surrounding streets are bright with possibility. There’s always something to see or do, whether you’re looking to broaden your horizons or share some time with friends.

Our students enjoy:

- Visiting the Green Garage, a hotspot for local sustainability initiatives
- Planting trees with The Greening of Detroit
- Ice skating in Campus Martius Park
- Taking in live music from the Fillmore to the Detroit Opera House
- Bowling at the Majestic
- Being starstruck at the campus planetarium
- Filling their bellies with Middle Eastern, Greek, Asian, Mexican and other international fare
- Feeling serene on idyllic Belle Isle
- Crushing the competition at Lefty’s Trivia Night
- Wandering through the Detroit Institute of Arts
With all this (and more) going on in our neighborhood, you’re going to want to live close to the action. Make yourself at home in one of Wayne State’s secure, comfortable and convenient residence halls.

- Atchison and Ghafari halls offer fully furnished single, double and triple occupancy rooms with private baths and onsite dining.

- The Towers residential suite complex has 11 stories of suites from singles to four bedrooms. The Towers Café serves meals and snacks, and there are kitchen and fitness facilities.

- University Tower, Chatsworth Tower and DeRoy Apartments are ideal for upperclassmen or graduate and professional students.

To learn more about living on campus, visit housing.wayne.edu.

Prefer to live off campus? You’ll find a variety of new condos and restored residential properties within walking distance of Wayne State. All are close to Midtown’s museums, shops, restaurants, pubs and entertainment venues. For more information, visit livemidtown.org.

The WSU Police Department is on the ball, boasting an average 90-second response time and safety statistics that place us among the safest college campuses in the state. Our newly renovated, fully equipped police headquarters on campus is staffed by 54 licensed police officers. Trained by the Department of Homeland Security, the police department maintains 24-hour monitoring and surveillance, and has the ability to lock down 90 percent of WSU’s buildings with a single mouse click.
“Living in Detroit means enjoying a magnificent 1930s home with unique architecture and stained glass windows — at a very affordable cost. It means the healthy and economical option to walk or bike almost everywhere. Overall, it means a wonderful lifestyle.”

— Professor Howard Matthew, chemical engineering
VISIT US

Ready to take the next step? Come check out Wayne State University in person. One-hour walking tours take place Monday through Friday at 10 a.m. and 2 p.m. Let a WSU student show you around and share inside information about living and learning in Detroit. Sign up at admissions.wayne.edu/visitus, then book a tour of the College of Engineering at engineering.wayne.edu/visit.

Engineering tours are available Tuesdays and Thursdays at 11:30 a.m. and 3:30 p.m.

Just can’t wait? Tour campus online anytime at virtualtour.wayne.edu.

APPLY NOW

To learn how to apply to Wayne State’s College of Engineering:

▼ Visit engineering.wayne.edu/admissions
▼ Call 313-577-3780
▼ Email engadmissions@wayne.edu