Dean of the College of Forest Resources and Environmental Science

Michigan Technological University seeks a visionary leader to serve as dean of the College of Forest Resources and Environmental Science.

93%
five-year average placement rate

Michigan Technological University is a public research university founded in 1885 in Houghton, Michigan, and is home to more than 7,000 students from 69 countries around the world. Consistently ranked among the best universities in the country for return on investment, our five colleges offer more than 120 undergraduate and graduate degree programs in science and technology, engineering, computing, forestry, business, health professions, humanities, mathematics, social sciences, and the arts. Our rural campus is situated just miles from Lake Superior in Michigan's Upper Peninsula, offering year-round opportunities for outdoor adventure.

More than $102 million in total research expenditures and 16 research centers and institutes help us foster a world-class and diverse faculty, staff, and student population. Working with industry partners and federal institutions like the National Aeronautics and Space Administration and the US Department of Defense, we help shape the future in science, technology, engineering, and mathematics. Our interdisciplinary emphasis and close-knit campus encourage students and faculty to work together across departments to build nanosatellites, deploy underwater robots, and develop the technologies health providers need to do their jobs–better. Our graduate students are scholars dedicated to cutting-edge research, inspiring classroom experiences, and community engagement. Our undergraduate students conduct more than 117,000 hours of paid research annually.

> **More than $102 million in total research expenditures and 16 research centers and institutes help us foster a world-class and diverse faculty, staff, and student population.**

We are Michigan's flagship technological university, grounded in and fueled by our shared vision: to improve the quality of life–and promote mutual respect and equity–for all people.

$102 MILLION
total research expenditures

The Role of the Dean of the College of Forest Resources and Environmental Science

The dean of the College of Forest Resources and Environmental Science (CFRES) is a forward thinking, innovative, and collaborative leader who provides strategic leadership in the College. The dean is the chief academic and administrative officer in the CFRES, reports directly to the provost, and shapes the vision for the role of the CFRES within the University, the State of Michigan, higher education, and society at large. The dean provides leadership to the College and works with other administrators (vice presidents, deans, and directors), as well as faculty, staff, and students, to promote excellence in research, teaching, and service. The dean is responsible for fostering successful collaborations among personnel within the CFRES, other areas of the University, and external constituencies.

The dean's responsibilities include the following:

1. Lead the CFRES in developing and implementing strategic plans for research and education in support of the goals of the University Strategic Plan.

2. Work with other senior academic leaders as part of the Deans Council, which meets regularly to advise the provost and provide overall academic leadership to the University.

3. Advance CFRES goals for a diverse, inclusive, and welcoming learning and work environment that creates a sense of belonging for all students, faculty, and staff.

4. Promote a culture of safety throughout the CFRES.

5. Work with faculty, staff, students, and the College Advisory Board to oversee the development and accreditation of undergraduate and graduate programs.

6. Represent the CFRES within the College, University, state, nation, and international community.

7. Oversee all on-campus CFRES facilities and off-campus facilities, including the Ford Center and Forest. Learn more at **mtu.edu/forest/fordcenter**

8. Lead planning, decision-making, and resource allocation activities within the CFRES.

9. Assist faculty and staff in professional development and conduct annual performance evaluations of tenured, tenure-track, instructional-track, and research faculty, as well as other direct reports.

10. Make recommendations to the provost and president regarding hiring, tenure, and promotion for tenured and tenure-track faculty, and appointments and renewals of instructional-track faculty and academic administrators within the CFRES.

11. Develop and foster relationships with key external constituents, including alumni, government, industry, and foundations, to increase levels of engagement and giving in order to obtain resources that support the continual growth and improvement of students, faculty, staff, programs, and infrastructure of the CFRES and the University.

12. Possess and encourage in others entrepreneurial and innovative approaches that value new educational and research initiatives.

13. Other duties as assigned.

Personal Qualifications and Requirements

Knowledge, skills, and abilities:

- Ability to articulate a clear strategic vision for the future of research, education, and fundraising in the CFRES.

- Demonstrated excellent interpersonal, oral/written communication, and presentation skills.

- Proven leadership ability and collaborative management skills.

- Demonstrated fiscal responsibility and the ability to create and manage budgets.

- Demonstrated success in maintaining and building relationships among diverse stakeholder groups both within and external to an organization.

Minimum qualifications:

- Earned PhD from an accredited university in a field related to forestry, environmental science or policy, or other natural resources related fields.

- Experience in a leadership role, such as administering an academic or research-oriented unit or organization.

- Scholarly activity appropriate for a senior-level tenured appointment.

- Demonstrated commitment to promoting a culture of safety as a professional value and an essential component of day-to-day activities.

Desired knowledge, skills, and abilities:

- An exemplary record of teaching at the college level.

- An exemplary record of research and experience in fostering collaborative, interdisciplinary research.

- Experience leading or contributing to entrepreneurial activities in teaching and/or research.

- Experience working within a shared governance environment.

- Experience generating resources through coordinated fundraising efforts, including relationship-building with potential donors.

- Experience with promotion and tenure (or a similar process).

College Overview

Forestry education began at Michigan Tech in 1936 with the formation of the forestry department. The first baccalaureate degree in forestry was awarded in 1940, and graduate degrees were added in 1967. Over the last 25 years, the degree programs offered in the College have expanded to include Applied Ecology and Environmental Science; Wildlife Ecology and Conservation; Sustainable Bioproducts; Environmental Science and Sustainability; and, most recently, Environmental Data Science (beginning fall 2024).

The College and its programs consistently rank highly both regionally and nationally, with multiple rankings among the nation's top 10. College Factual, a member of USA Today's College Partner Network, recently ranked Michigan Tech as having the No. 1 forestry school, the No. 2 forestry graduate program, the No. 2 wildlife management program, and the No. 3 graduate ecology program in the Great Lakes region. Our BS in Forestry and Master of Forestry programs are both accredited by the Society of American Foresters (SAF).

In addition to teaching excellence, our growing research program exceeded $7 million in the last fiscal year, and the College ranked No. 1 in research publication citations in a study by the SAF published in 2018.

CFRES Research

Our research is interdisciplinary and supported by state and federal agencies, as well as private industry and nonprofit entities. Our research and scholarship fall into a range of thematic areas. These include:

Forestry

Research-based MS and PhD programs, as well as SAF-accredited BS in Forestry and Master of Forestry degrees, provide a springboard for research all over the globe, catalyzed by a vital faculty dedicated to world-scale work on forest management issues and how human activities impact ecological processes in forests. Our work runs the gamut from canopy photosynthesis to invasive earthworms, and from silvicultural options for climate-change resilience and adaptation in northern hardwood forests in the Lake States Region to ecosystem heating in tropical forests. Our work touches all aspects of the forestry profession, including regeneration, conservation, ecosystem restoration, invasive species, forest health, and sustainable harvests for bioenergy development.

Wildlife ecology and conservation

The moose and wolves of Isle Royale—the longest-running predator-prey study in the world—wolf studies at Yellowstone National Park, and red wolf restoration in Gulf Coast states all have a home at Michigan Tech. From habitat modeling, field studies of demographic traits, and animal behavior studies to stable isotope and genetic analyses, our internationally recognized scientists take on the big issues: overabundant game species, impacts of climate change on migrating birds, the role of large animals in forest nutrient recycling, how wind and biomass energy development affects wildlife, and how wildlife resource management affects humankind.

Applied ecology

The many nuances of natural resources, applied ecology, and environmental science compel us to understand forest, rural, and urban networks

as part of the integrative landscape—and to consider the human context for management and decision-making. Such an approach lets our researchers investigate how hydrology and glacial retreat affect a Peruvian cattle-farming community, bridge knowledge systems between Indigenous and non-Indigenous communities to understand the dynamics of a contaminated tribal landscape system, examine past climate trends and tree growth by studying the ring widths in living trees and centuries-old submerged logs, and study the ecological effects over two decades of elevated atmospheric nitrogen deposition. Areas of focus include forest, bioenergy, and water resource management, and public policy and involvement. Our faculty also study individual species, animal-ecosystem interactions, climatological studies, and carbon nutrient and water cycling in forests and wetlands.

Biotechnology and molecular genetics

The biotechnology and molecular genetics program focuses on understanding the life process and genetic controls of forest organisms as they relate to their environment. Researchers study how ecosystems react to environmental change: divergence in multispecies oak communities, bud break in woody perennials, drought and temperature responses of populations within species, low-nitrogen root development, and seasonal dormancy. They study historical, ecological, and population genetics to bridge the gap between ecological and genetic approaches. They collaborate in interdepartmental work that furthers breakthroughs in identification of gene networks and their functions, microarray and RNA sequencing, identification and characterization of natural antisense transcripts in trees, plant genomics, human-environmental sustainability science, and biodiversity conservation.

Forest biomaterials

The Michigan Tech biomaterials program harnesses University-wide programs and resources to follow forest biomaterials from production, engineering, and marketing to recycling and ecological sustainability. Research projects—encompassing harvesting, soil productivity, policy, urban forestry, conversion of biomass into high-value carbon products, timber assessment, and acting as an educational conduit—allow the region to respond to the promising, yet largely untapped market in the ninth-most-forested state in the nation.

Geospatial science and technology

Natural disaster mapping, invasive species mapping, sensing of forest health from the landscape to individual-tree level, conifer and mesquite encroachment into prairie chicken habitats, soil erosion risk assessment, and biomass inventory are among the boundless applications for remote sensing and geospatial technology—as we detect, map, compare, inventory, and model during the course of our research. All of the College's undergraduate programs include a strong geospatial component, including classes in Geographic Information Systems, Global Positioning Systems (GPS), remote sensing, and unoccupied aerial vehicle (UAV) use. GIS training and support is also pivotal to all of our graduate programs, and we offer a professional Master of Geographic Information Science. Additionally, integrated geospatial technology resources that address aquatic ecology and ecosystem dynamics are housed in Michigan Tech's Great Lakes Research Center.

Centers, institutes, and shared facilities

Our researchers are involved in numerous multidisciplinary research efforts involving both scientists from other units at Michigan Tech and outside collaborators. These efforts are aided by the presence of research centers and institutes whose missions include fostering such collaborations. Key centers for the College include the Ecosystem Science Center; the Environmental Restoration Hub; the Great Lakes Research Center; the Michigan Tech Research Institute in Ann Arbor, Michigan; and the recently launched Hardwood Mass Timber Institute. In addition, analytical capabilities are supported by shared facilities such as the Lab for Ecological Analyses in Forests (LEAF), housed within the College; the AQUatic Analysis (AQUA) Laboratory; and the Chemical Advanced Resolution Methods (ChARM) Laboratory.

Educational programs

Our undergraduate and graduate degree offerings include six undergraduate degrees and eight graduate degree programs.

- Applied Ecology and Environmental Science—BS
- Environmental Science and Sustainability—BS
- Forestry—BS
- Natural Resources Management—BS
- Sustainable Bioproducts—BS
- Wildlife Ecology and Conservation—BS
- Applied Ecology—MS
- Ecology Management—MS
- Forest Molecular Genetics and Biotechnology—MS, PhD
- Forestry—MS
- Forestry—MF
- Geographic Information Science—MGIS
- Forest Science—PhD

Strategic planning

In a world marked by rapid scientific and technical change, graduates who grasp the fundamentals of science and math can expect to have successful careers. Our students are also prepared to navigate the global changes in societal patterns, economics, and culture that coincide with the rapid advancements in science and technology.

Our vision:

To be a global leader in the development and communication of science and technology related to the understanding, stewardship, and conservation of natural systems, of which humans are an integral part.

Our mission:

Given our changing world, we work to address the challenges in natural resource sustainability through education and training, novel research, innovation, and outreach.

Our goals:

We accomplish our mission by engaging with people, leading vibrant programs, and caring for the places in which we work and conduct research. We lead into the future by focusing on our students, their creativity, and the challenges and opportunities that they inherit.

Guided by the University's Strategic Plan and Portrait 2045, the CFRES coordinates closely with faculty and University efforts to strategically grow our enrollment and impact the communities we serve. The College leadership develops top annual priorities, being cognizant to sustain ongoing initiatives.

The College also has a strategic plan that centers around people, programs, and places:

People

- We promote excellence in students, faculty, staff, and alumni throughout their careers.

- We maintain interpersonal relationships that are inclusive and in which all people are valued and respected.

- We provide opportunities in natural resource science, appreciation, and stewardship for people of all social and cultural identities.

Programs

- We aim to better understand the role of humans in natural systems.

- We offer educational programs to train the present and future leaders in ecosystem studies and stewardship.

- We conduct research with global impacts that advances understanding of the components, function, and sustainability of forests and related ecosystems around the world.

Places

- We maintain high-quality physical spaces for learning and research, in an environment that is safe, accessible, and welcoming to all.

- We steward the natural areas of the land to convey our values of sustainable land management with a view to future generations.

- We provide opportunities and places for people to interact with and share the natural world.

The College's full strategic plan is available at:

mtu.edu/forest/cfres-strategic-plan

Diversity

The diversity statement for the CFRES was developed by our diversity committee, with input from stakeholders in the College. It states:

"Natural resource decisions affect people of all cultures, backgrounds, perspectives, and belief systems. Therefore, excellence in environmental stewardship requires a workforce of managers, scientists, and policy makers that reflects this diversity to help achieve just, equitable, and sustainable outcomes. Natural resource professionals serve diverse communities, and therefore inclusion of diverse perspectives is a core tenet of the profession.

CFRES strives to provide a safe, supportive environment for staff, students, faculty, alumni, and communities of all social and cultural identities. Our commitment to diversity necessitates that we create a community that honors the expression of diverse perspectives, supports work and learning that is free from discrimination and harassment, promotes inclusion and respect, and regularly evaluates progress toward meeting diversity goals. To achieve an equal and fair education and work environment we will:

- Create a culture sensitive to diversity issues and supportive of diverse community members;

- Recruit, support, and retain diverse staff, students, and faculty;

- Integrate diversity-related skills and knowledge into learning experiences;

- Conduct research in areas that have positive impacts for diverse communities.

CFRES strives to build upon this keystone of diversity, equity, and inclusion as a foundational piece of our college. We challenge the members of our community to engage differences as strengths in order to continuously improve campus culture and to develop a diverse and exceptional community that ensures equality of access, opportunity, participation, and representation for all."

Our College was also the first academic unit at Michigan Tech to publish a strategic plan for diversity, equity, inclusion, and sense of belonging (DEIS). It has the following goals:

1. Understanding existing and long-term diversity and sense of belonging at CFRES and threats to sense of belonging.

2. Improve sense of belonging at CFRES.

Within these goals, projected outcomes and action items are listed. The plan is available at:

mtu.edu/forest/diversity-plan

The Value of a Michigan Tech Education

Four decades have passed since Michigan Tech enrolled as many students as it did this fall: 7,320 overall, including 1,463 incoming first-year Huskies.

Continuing a decade-long upward enrollment trend for women at the University, more than 2,200 women chose Michigan Tech this year, the University's highest total ever. Of MTU's incoming first-year students, 27 percent came from outside Michigan—the most in University history—with the largest growth coming from Illinois: an increase of 62 percent. The retention rate for first-year students rose 2.7 percentage points to 86.6 percent, a new University record. Domestic students from historically underserved communities now make up 11 percent of the total student body and 13 percent of the incoming class, tying the all-time high set in 2020. Overall enrollment is up 3.5 percent from last year, marking the third consecutive year of overall enrollment growth for the University, and graduate student enrollment is up 4.3 percent—making this the largest class of graduate students since 2016.

Top 20
public college in the nation
(Wall Street Journal)

The numbers tell the story: Demand for a degree from Michigan's flagship technological university has never been stronger.

Why?

Because our reputation for graduating top-tier, highly skilled professionals able to make an impact in the workforce is only getting stronger. Over 2,000 recruiters from more than 400 companies—including Dow, Stellantis, Caterpillar, General Mills, and Harley-Davidson—come to campus each September for our fall Career Fair, one of the largest of its kind in the country.

With a placement rate of 93 percent within six months of graduation and a median early career salary of $71,100, Tech alums find work in their field of study and get good jobs that pay them back. Statistics like this are why Tech recently got ranked the 16th best public university in the nation by the Wall Street Journal—and first in Michigan for salary impact.

Michigan Tech faculty and staff work hard to ensure our graduates are prepared not only with a singular set of skills, but with the ability to reinvent themselves to remain relevant with the changing times. Positive enrollment trends and impressive return-on-investment statistics validate their efforts and reaffirm what we know to be true: There is great demand from prospective students for a Michigan Tech education, and great demand from employers for Michigan Tech grads.

Demand for a degree from Michigan's flagship technological university has never been stronger.

#1
best college in Michigan
for salary impact
(Wall Street Journal)

86.6%
retention rate

7,320
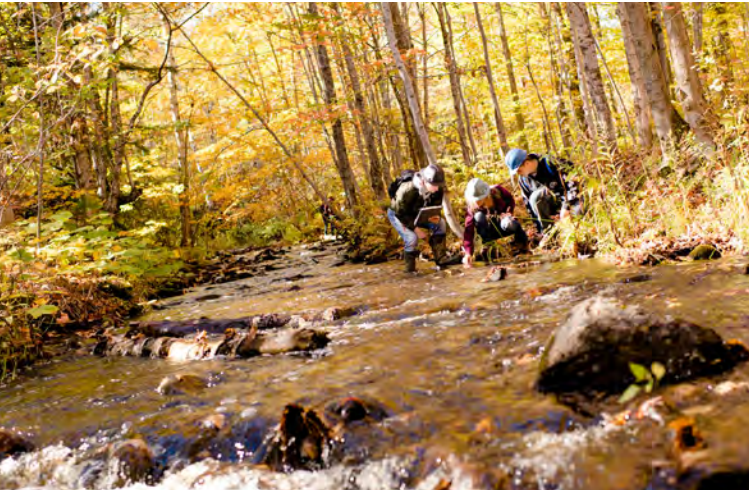largest enrollment
since 1983

3.5%
undergraduate enrollment
growth over last year

4.3%
graduate enrollment
growth over last year

About the University

Our vision:

Michigan Tech is a globally recognized technological university that educates students, advances knowledge, and innovates to improve the quality of life and to promote mutual respect and equity for all people within the state, the nation, and the global community.

Our mission:

To create solutions for society's challenges by delivering action-based undergraduate and graduate education, discovering new knowledge through research, and launching new technologies through innovation.

Our goals:

Michigan Tech will accomplish our mission through interdisciplinary education, research, and engagement with partners to advance sustainable economic prosperity, health and safety, ethical conduct, and responsible use of resources. Our specific focus is on education, scholarship, and people.

- Education: Provide a distinctive and rigorous action-based learning experience grounded in science, engineering, technology, business, sustainability, and an understanding of the social and cultural contexts of our contemporary world.

- Scholarship: Enhance research, scholarship, entrepreneurship, innovation, and creative activities that promote sustainable economic prosperity, health and safety, ethical conduct, and responsible use of resources.

- People: Foster and support an exceptional and diverse community of students, faculty, and staff.

Welcome to the Keweenaw

Our setting on Michigan's Keweenaw Peninsula provides a beautiful backdrop for world-class research and education.

#8
most beautiful small town in America (Architectural Digest)

- Houghton, its sister city Hancock, and the surrounding towns have a combined population of approximately 15,000. With the addition of the Michigan Tech student population, our community grows to more than 24,000.

- Niche.com ranks Houghton as the safest public college in the state of Michigan.

600+
acres of recreational forest to ski, mountain bike, and explore

- Houghton-Portage Township schools rate 10-out-of-10 on greatschools.org, with Houghton Elementary School earning National Blue Ribbon recognition in 2023.

- The Keweenaw Peninsula is temperate, averaging in the low to mid-20s in the winter and mid to high-70s in the summer. Winter brings more than 200 inches of snow. Summer is consistently sunny.

- The ruggedly beautiful Keweenaw Peninsula is one of the Midwest's top year-round recreation destinations, thanks to its record snowfall and comfortable summers. Recently named one of the "36 Best Places to Visit in the US for Adventure" by Outside, outdoor enthusiasts of all ages and abilities will find ample opportunity to downhill and cross-country ski, snowboard, bike, hike, paddle, camp, golf, and more. Surrounded by Lake Superior, pristine shorelines earned the Keweenaw second place in Lake Superior Magazine's "Top 10 Lake Superior Destinations" list.

- Houghton's historic downtown features locally owned shops, eateries, museums, and brewpubs, while chain restaurants and shopping outlets are a short car ride away on the business strip. You can also explore locally owned stores across the bridge in Hancock and in historic Calumet, just 15 miles north of campus.

- Michigan Tech's arts and entertainment scene is vibrant, diverse, and global. The University is home to the region's premier performing arts venue, the Rozsa Center for the Performing Arts, featuring annual seasons that include touring shows (an annual Broadway tour, dance, music, speakers, comedy, and more), a Michigan Tech Music series (including jazz, symphony orchestra, bands, new music, and choir), Michigan Tech Theatre series (plays, musicals, fringe, and immersive events), and the Michigan Tech Art series.

60+
arts events held at the Rozsa Center for the Performing Arts each season

University Events and Fast Facts

1,421 graduate students

120+ undergraduate programs

45+ master's programs

29 PhD programs

Winter Carnival: Organized by Blue Key National Honor Society, Winter Carnival started in 1922 and has grown to become one of the largest annual winter festivals in the nation. Featuring dozens of one- to two-story intricate snow statues all around campus and the community, this event also brings together students to participate in broomball, comedy skits, sleigh rides, a royalty coronation, a beard contest, and lots of winter fun.

Parade of Nations: Michigan Tech hosts the region's largest, oldest multicultural festival, flying the flags of more than 60 countries represented on campus and in our community. Thousands join us in mid-September for international food, entertainment, and family activities promoting global peace and unity.

To learn more or to apply, visit:

mtu.edu/provost/hiring-initiatives