School of Forest Resources and Environmental Science

Michigan Technological University
Houghton, Michigan
mtu.edu
Michigan Technological University seeks a visionary leader to serve as Dean of the School of Forest Resources and Environmental Science

Michigan Tech was founded in 1885, with a mission to train mining engineers in Upper Michigan’s Copper Country. The University has evolved into a leading public research institution, home to more than 7,000 students from 60 countries around the world. Our beautiful campus in Michigan’s Upper Peninsula overlooks the Keweenaw Waterway and is just a few miles from Lake Superior.

MTU offers more than 120 undergraduate and graduate degree programs in science and technology; forestry; business and economics; health professions; humanities; mathematics; arts; and social sciences through seven Colleges and Schools. Our multidisciplinary emphasis removes barriers for students and faculty to engage in educational and research opportunities across disciplines.

More than $72 million in research expenditures and 19 research centers and institutes help us foster a world-class and diverse faculty, staff, and student population.

Partnering with industry and federal institutions like the National Aeronautics and Space Administration, the National Science Foundation, the Environmental Protection Agency, and the Department of Energy, we develop, apply, and create knowledge in science, technology, engineering, natural resources, and mathematics.

More than $72 million in total research expenditures and 19 research centers and institutes help us foster a world-class and diverse faculty, staff, and student population.

Our graduate students are active in one-on-one graduate-to-faculty research projects, and in 2016, our undergraduate students conducted 126,000 hours of paid research.

We work across disciplines to build technologies that improve ecological decisions and develop the knowledge natural resource managers need to do their jobs—better.

Undergraduate Job Placement Rate:
94%

More than $72.5 MILLION in total research expenditures.
The Dean of the School of Forest Resources and Environmental Science (SFRES) is the chief academic and administrative officer for the School. The Dean will maintain and enhance educational and research efforts within the broadly defined fields of environmental science and natural resources. The Dean is responsible for providing leadership and fostering successful collaborations within the SFRES, with other areas of the University, and with external constituencies. The Dean reports to the Provost and works with the deans, faculty, staff, and students across campus to promote excellence in the university.

The dean's responsibilities include the following:

1. Lead SFRES in promoting a safe, diverse, inclusive, welcoming, and equitable environment for all students, faculty, and staff.
2. Work with faculty, staff, students, and the School's Advisory Board to oversee the development and accreditation of undergraduate and graduate programs.
3. Represent the School within Michigan Tech, and at state, national, and international levels.
4. Successfully build community, research, and educational partnerships through external fundraising and advancement.
5. Work cooperatively with other Michigan Tech deans, vice presidents, and the Provost to advance the mission and strategic plans of the School and the University.
6. Make recommendations regarding hiring, promotion, and tenure of faculty and staff.
7. Oversee all on-campus SFRES facilities and the Ford Center and Forest.
8. Oversee all budgeting and resource allocation for the School.
9. Assist faculty and staff in professional development and conduct annual performance evaluations of the tenured, tenure-track and research faculty, as well as the Dean's direct reports.

Supervisory Responsibilities

The Dean of the School of Forest Resources and Environmental Science will lead a unit presently comprising 21 tenure-track faculty, 11 research faculty, 20 research professionals, 16 administrative professionals, 60 graduate students, and 163 undergraduates. The Dean will enhance and advocate for the professional growth of all the SFRES constituents. The Dean will encourage and facilitate an open exchange of ideas through formal and informal interactions among all SFRES stakeholders.

Required Education and Experience:

- Earned Ph.D. from an accredited university in a field related to environmental science or natural resources.
- Scholarly activity appropriate for a senior-level tenured appointment.
- Experience in a leadership role, such as administering an academic or research-oriented unit or organization.
- Demonstrated record of promoting and maintaining a diverse, inclusive, and equitable work environment.
- Demonstrated record of promoting a culture of safety as a professional value and an essential component of day-to-day activities.

Required Skills and Abilities:

- The ability to attract resources through external fundraising or advancement.
- Demonstrated fiscal responsibility and ability to manage budgets.
- The ability to develop and implement strategic and tactical plans.

Desired Skills and Abilities

- Ability to nurture and catalyze the success of students, faculty, and staff, both individually and collectively.
- Ability to maintain and develop strong undergraduate and professional programs, including maintaining relevant accreditation.
- Experience managing research and graduate programs.
- Experience with managing a field station or off-campus facilities.
- Proven ability to foster collaborative efforts by building partnerships with national and/or international constituencies.
School 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. Graduate degree programs were added in 1967.

College Factual, a website member of USA Today's College Partner Network, has ranked Michigan Technological University fifth in the nation in 2017 for bachelor's degree programs in the general area of natural resources and conservation.

In addition to teaching excellence, The Chronicle of Higher Education ranked the School first in faculty scholarly productivity. A study published in the Journal of Forestry ranked the School's faculty members No. 1 for number of forestry journal citations. SFRES is also top-ranked for research citations per faculty member at MTU. Our national and international research programs are awarded over $4 million annually.

SFRES currently recognizes six programmatic areas:

- **Forestry.** Our forestry program offers SAF-accredited BS in Forestry and Master of Forestry (MF) degrees, as well as research-based graduate programs (MS and PhD). Our research addresses issues of forest management and how human activities impact ecological processes in forests. We work in managed and unmanaged natural forests, as well as in intensive plantation systems.

- **Wildlife Ecology and Management.** The wildlife ecology and management program at Michigan Tech combines broad training in wildlife science, conservation biology, and ethics with hands-on field experience in forest and habitat management.

- **Natural Resources and Applied Ecology.** We teach and conduct research in fundamental ecological sciences, applied ecological sciences, and natural resource sustainable management.

- **Biotechnology and Molecular Genetics.** The biotechnology and molecular genetics program at Michigan Tech implements a holistic focus on understanding the life process and genetic controls of forest organisms as they relate to their environment.

- **Forest Biomaterials.** The biomaterials program at Michigan Tech reaches broadly across university colleges and schools. The program follows forest biomaterials from production, engineering, marketing, recycling, and ecological sustainability.

- **Geospatial Sciences and Technology.** All of our undergraduate programs have a strong geospatial component, including classes in geographic information systems (GIS), land measurements, the Global Positioning System (GPS), and remote sensing. We also include geospatial components in all of our graduate programs, and offer a professional Master of Geographic Information Science (MGIS).

Each area is engaged in undergraduate and graduate student education and actively funded research that is supported by federal and state agencies, as well as private industry and non-profit entities.

The School administers four undergraduate degree programs:
- Bachelor of Science in Forestry
- Bachelor of Science in Applied Ecology and Environmental Science
- Bachelor of Science in Wildlife Ecology and Management
- Bachelor of Science in Natural Resources Management

The School also offers eight graduate degree programs (six masters and two PhDs):
- Master of Forestry (MF)
- Master of Geographic Information Science (MGIS)
- Master of Science in Forestry (MS)

- Master of Science in Forest Ecology and Management (MS)
- Master of Science in Applied Ecology (MS)
- Master of Science in Forest Molecular Genetics and Biotechnology (MS)
- Doctor of Philosophy in Forest Science (PhD)
- Doctor of Philosophy in Forest Molecular Genetics & Biotechnology (PhD)
School Overview (cont’d)

School Mission Statement:
We foster excellence in forestry and ecological science.

School Vision:
1. We will be a premier community of scholars who investigate ecological processes from molecular to global scales and their relationship to society.
2. We strive to be internationally recognized educators of creative scientists and those who develop both technologies and strategies for sustainable natural resource management.
3. We educate students in the maintenance of healthy ecosystems through intensive field-based training and cutting-edge interdisciplinary research programs.

Goals and aspirational values:
The principles that guide us and influence our decisions are based on the following core values:

- We have a passion for science. Scholarly efforts are viewed by all as a creative extension of continuous learning and are rooted in everything we do.
- The values to which we aspire are:
  - We strive to continuously be conscious of the global connectedness of our decisions.
  - We recognize the importance of a diverse faculty, staff, and student community.
  - We foster stronger leadership and communication among faculty, staff, and students.

Ongoing Developments in the School of Forest Resources and Environmental Science

The School’s education and research programs are directed at instruction and science as they relate to future natural resource management within the state, nation, and world. To strategically plan, the following “future” will drive the School’s education and research efforts:

- Human demography and development will continue to cause more environmental change and influence our ability to sustainably manage natural landscapes.
- Global climate change and loss of biodiversity will impact ecosystem functions.
- Urban settings and large federal, state, corporate, and non-profit land holdings will increasingly be utilized for recreation and/or preservation.
- Increased utilization of real-time, computer-based technologies such as GIS, GPS, and remotely sensed images will improve our knowledge of resource availability and use.
- Forests in the US and in other countries will be more intensely used for biomaterials and recreation.
- Biotechnological and genomic advances will improve natural and plantation resource management and enhance the world’s knowledge of key characteristics that control plant and animal functions.
- Invasive species will significantly alter natural and manmade landscapes.
- Globalization will influence the use of forests and change career opportunities for natural resource graduates.
- Environmental restoration in degraded areas will be ecologically and economically important.

- Fragmentation and parcelization will drive public policy and how we manage our lands in the US and around the world.
- Managing natural resources in urban areas will become increasingly important.

Current Priorities for Fundraising within the School

Students:

- Diversity Issues and Dean’s Endowment: Among all major disciplines, natural resources rank at the very bottom in the proportion of minorities with bachelor’s degrees in the workforce and is second only to engineering as the lowest in the proportion of women. Our student enrollment reflects this. Embarking on an initiative to increase gender and racial/ethnic diversity in SFRES involves offering competitive scholarships and creating an inclusive environment.

- Forest and Environmental Resource Management (FERM) Program: Rapidly becoming one of the School’s premiere educational enhancements, FERM involves executing land management actions on SFRES working forests and those of other landowners. We seek funding for a professor of practice and associated costs to oversee this program.

- Scholarships: The School awards $89,000 in scholarships to its students each year, and the University provides an additional $770,000 for both academic and need-based scholarships. The University continues to strive for highly qualified and diverse students and continued access to scholarships will prove to be a critical enabler. The School’s goal is to increase annual scholarship awards from $50,000 to $100,000, which will help offset the costs of tuition, keeping us competitive with other institutions.
Ongoing Developments in the School of Forest Resources and Environmental Science (cont’d)

- **Global Engagement:** There is a need to provide opportunities for SFRES faculty and student collaborations with universities around the globe. We seek funds for the global exchange of faculty and students, as such collaborations require extensive travel to initiate and maintain joint endeavors.

- **Student Clubs:** Student clubs are extremely important in the development of our students. Through involvement in these clubs, students develop leadership skills and meaningful relationships with their peers and future professional colleagues. They come to appreciate their education by participating in regional and national competitions with students from other academic institutions.

- **Facilities:**
  - **Ford Center and Forest:** The Ford Center and Forest is minimally funded by state dollars for higher education and is an auxiliary unit of the University, yet plays a major role in the teaching, research, and outreach missions of the School. Its operations and maintenance funds are partially generated from timber sale revenues, which have declined in the past eight years.
  - **Greenhouses:** The current greenhouses are operating at near capacity. Revenue-positive research cannot be conducted without such space. Thus, we seek funds for the construction of an additional greenhouse.

- **Otter River Cabin Restoration:** The byproduct of a three-way land swap with Michigan Tech, the U.S. Forest Service, and the Michigan DNR, the 80-year-old cabin has been a favored respite by our students and alumni. However, it has deteriorated to the point where it needs to be razed and replaced with a new structure(s), while retaining legacies from the original structure such as the copper fire hood.

- **Research:**
  - **Predator-Prey Studies:** These studies include the longest running predator-prey study in the world, which garners international prestige and ongoing national publicity for the University. We seek funds to endow a faculty position in predator-prey relationships and to oversee the continuation of these studies.
  - **Forest Biomaterials Initiative:** This is one of four University-wide initiatives currently being featured for development. The Michigan Forest Biomaterials Initiative is designed to enhance the role of forest products in the state’s economy and overall quality of life for its citizens.
  - **Forest Health Initiative:** The Michigan Department of Natural Resources has proposed to cost-share a tenure-track faculty position with Michigan Tech, and we seek funds to meet their match. This position will enhance the prestige and noteworthiness of Michigan Tech and contribute significantly to the health of Michigan’s forests.
Glenn D. Mroz became the ninth president of Michigan Technological University in 2004 after serving as dean of the School of Forest Resources and Environmental Science for four years. He served as a faculty member in the School since 1980. Mroz earned his BS and MS degrees in forestry from Michigan Technological University and earned his PhD degree in forestry from North Carolina State University in 1983.

Mroz is chair of the Presidents Council State Universities of Michigan and former chair of the Great Lakes Intercollegiate Athletic Conference Council of Presidents. He has also served as a trustee of the Citizens Research Council of Michigan. As president, he has supported the formation of the Michigan Tech Entrepreneurial Support Corporation and Superior Innovations—corporations that support startup companies. He is also a member of the Society of American Foresters and Xi Sigma Pi, the forestry honor society.

On April 6, 2017, President Mroz announced his intention to return to faculty no sooner than June 30, 2018. Prior to the announcement, Mroz and University leadership developed a comprehensive transition plan in anticipation of leadership succession. Mroz's announcement marked the beginning of the transition period, allowing the Board of Trustees to conduct a thorough and effective search.

Mroz is the third-longest serving current president among the 15 public universities in the state of Michigan and will be the fourth-longest serving president at Michigan Tech by the time he steps down next year.

Jacqueline Huntoon is provost and vice president for academic affairs at Michigan Technological University. Huntoon served as dean of Michigan Tech’s Graduate School from 2005 to 2015. She is also a professor in the Department of Geological and Mining Engineering and Sciences. From 2003 to 2005, she served as program director for diversity and education in the National Science Foundation’s Directorate for Geosciences.

Huntoon has been recognized nationally for her leadership in higher education and in her field of geology. She has served as a member of the boards of the Council of Graduate Schools, Geological Society of America, Graduate Record Exam Michigan Science Teachers Association, Midwestern Association of Graduate Schools, and National GEM Consortium. She is a fellow of the Geological Society of America.

Huntoon earned her PhD in Geology at the Pennsylvania State University and is a member of the Geosciences Department Alumni Advisory Board. In 2016, she was awarded the Charles L. Hosler Alumni Scholar Medal by the College of Earth and Mineral Sciences at Penn State. Her work has been supported by more than two dozen sponsored research awards, including most recently a $5 million grant from the Herbert H. and Grace A. Dow Foundation to reform middle-school science education in Michigan.

The Value of a Michigan Tech Education

“Less than one percent of Michigan Tech students come from families who are in the top one percent of family income. But 2.2 percent of our students end up there later in life.

About 38 percent of Michigan Tech students come from families in the top 20 percent of family income; 61 percent of our students end up there later in life.

Eighteen percent of our students move up two or more income quintiles. And the chance of a student moving from the bottom 20 percent of household income to the top 20 percent? It’s 47 percent.

This is why access to education is important. This is why financial aid is important. Over 90 percent of Michigan Tech students receive financial aid in the form of merit and need-based support, and 26 percent—those students from the bottom fifth of family income—benefit directly from Pell grants. In fact, seven percent of our first-year students this year had financial need. They had more need than their counterparts at 11 of the other Michigan public universities and at 13 of the state’s private colleges.

These are good, solid students from all 80 counties, which is why we’re rated as an A+ school for B students by US News & World Report and a (great) school that you can actually get into by Time and Money magazines.”

- President Glenn Mroz
About the University

Our vision: To lead as a global technological university that inspires students, advances knowledge, and innovates to create a sustainable, just, and prosperous world.

Our mission: To deliver action-based undergraduate and graduate education and discover new knowledge through research and innovation.

- We create solutions for society’s challenges through interdisciplinary education, research, and engagement to advance sustainable economic prosperity, health and safety, ethical conduct, and responsible use of resources.
- We attract exceptional students, faculty, and staff who understand, develop, apply, manage, and communicate science, engineering, technology, and business to attain the goal of a sustainable, just, and prosperous world.
- Our success is measured by the accomplishments and reputation of our graduates, national and international impact of our research and scholarly activities, and investment in our University.

Our goals:
1. An exceptional and diverse community of students, faculty, and staff.
2. A distinctive and rigorous action-based learning experience grounded in science, engineering, technology, sustainability, business, and an understanding of the social and cultural contexts of our contemporary world.
3. Research, scholarship, entrepreneurship, innovation, and creative work that promotes a sustainable, just, and prosperous world.

What do we value?
- Community
- Scholarship
- Possibilities
- Accountability
- Tenacity
Welcome to The Keweenaw

Our setting on Michigan’s Keweenaw Peninsula provides a beautiful backdrop to world-class research and education. Michigan Tech is located in Houghton, Michigan, which was included as one of the best rural places to live in the US in The 100 Best Small Towns in America by Norman Crampton.

• Houghton, its sister city Hancock, and the surrounding towns have a combined population of approximately 15,000. However, add in the Michigan Tech student population, and it grows to more than 22,000.

• Safewise ranks Houghton in the top 20 safest college towns in America.

• Houghton-Portage Township schools rate 9 out of 10 on greatschools.org.

• 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, whereas summers are generally sunny.

• The ruggedly beautiful Keweenaw Peninsula is one of the Midwest’s top year-round recreation destinations, thanks to its record snowfalls and comfortable summers. The Keweenaw was rated one of the top 10 outdoor adventure spots by National Geographic Adventure Magazine. Outdoor enthusiasts of all ages 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, and National Scenic Byways recognized us as “one of the best snowmobiling and winter sport destinations in the US.”

• Houghton’s historic downtown features locally owned shops, eateries, museums, and brewpubs, while chain restaurants and major 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 Main Street 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 area’s premier performing arts venue, the Rozsa Center, and the unique black-box McArdle Theatre in the Department of Visual and Performing Arts.
### University Events and Fast Facts

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<th>Graduate Students:</th>
<th>Undergraduate Programs:</th>
<th>Master’s Programs:</th>
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<td><strong>1,443</strong></td>
<td><strong>120+</strong></td>
<td><strong>40</strong></td>
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**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 queen 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.

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To learn more or to apply, visit:  
[mtu.edu/dean-sfres](http://mtu.edu/dean-sfres)

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*Michigan Technological University is an equal opportunity educational institution/equal opportunity employer, which includes providing equal opportunity for protected veterans and individuals with disabilities.*