Michigan Technological University College Portrait

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Michigan Technological University

Michigan Technological University

Michigan Tech was founded in 1885 and today is a leading public research university developing new technologies and preparing students to create the future for a prosperous and sustainable world. Michigan Tech offers more than 130 undergraduate and graduate degree programs in engineering; forest resources; computing; technology; business; economics; natural, physical and environmental sciences; arts; humanities; and social sciences. Michigan Tech undergraduates study across disciplines, through team learning and research. Graduate students develop as scholars in a wide range of academic programs. In courses and research, our faculty and students integrate learning with application.

Living in the Huskies Community

The Huskies Community

Enterprise teams allow students to solve real problems for industry sponsors. The Pavlis Institute for Global Technological Leadership and the Senior Design capstone program provide additional leadership training. Tech has more Peace Corps Master’s International programs than any other US university, and our Graduate School continues to grow, especially at the doctoral level. More than 14 percent of our students come from other nations. Our students enjoy on-campus biking and jogging trails and golf course. Winter brings Nordic skiing and downhill skiing and snowboarding on our ski hill, and Winter Carnival features massive snow statues. The Rozsa Center hosts cultural events, and Huskies athletics include NCAA Division I men’s ice hockey; Division II men’s football; men’s and women’s basketball, tennis, track and field, Nordic skiing, and cross country; and women’s soccer and volleyball.
The Big Picture: How many students were on campus in Fall 2011

**Undergraduate and Graduate Student Total**

| Total Students | 7,034 |

**Undergraduate Student Demographic Breakdown**

| Total Undergraduate Students | 5,731 |

<table>
<thead>
<tr>
<th>Gender</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Women</td>
<td>1,455</td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td>Count</td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>--------</td>
</tr>
<tr>
<td>American Indian / Alaskan Native</td>
<td>42</td>
</tr>
<tr>
<td>Asian</td>
<td>51</td>
</tr>
<tr>
<td>African American / Black</td>
<td>83</td>
</tr>
<tr>
<td>Hispanic</td>
<td>91</td>
</tr>
<tr>
<td>Native Hawaiian or Other Pacific Islander</td>
<td>5</td>
</tr>
<tr>
<td>White</td>
<td>4,781</td>
</tr>
<tr>
<td>Two or More Races</td>
<td>73</td>
</tr>
<tr>
<td>International</td>
<td>414</td>
</tr>
<tr>
<td>Race/Ethnicity Not Reported</td>
<td>191</td>
</tr>
</tbody>
</table>

**Where do Michigan Tech undergraduates call home?**

<table>
<thead>
<tr>
<th>Location</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michigan</td>
<td>72%</td>
</tr>
<tr>
<td>Other US States &amp; Territories</td>
<td>21%</td>
</tr>
<tr>
<td>Other Countries</td>
<td>7%</td>
</tr>
</tbody>
</table>

**How old are Michigan Tech undergraduates?**

<table>
<thead>
<tr>
<th>Age Measure</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Age</td>
<td>21</td>
</tr>
<tr>
<td>Percent of Undergraduates Age 25 or Older</td>
<td>5%</td>
</tr>
</tbody>
</table>
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New Student Applications (Fall 2011)

Of the 4,573 new freshman applicants, 75% were admitted and 34% of the admitted students enrolled at Michigan Technological University in Fall 2011.

New Freshman Admissions Info

Of the 754 transfer applicants, 53% were admitted and 55% of the admitted students enrolled at Michigan Technological University in Fall 2011.

Transfer Admissions Info

Freshmen High School Background and Test Scores
Test(s) Required for Admission: SAT or ACT recommended

<table>
<thead>
<tr>
<th>Test Scores of Enrolled New Freshmen</th>
<th>ACT</th>
<th>SAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Composite</td>
<td>24 - 29</td>
<td></td>
</tr>
<tr>
<td>Math</td>
<td>24 - 30</td>
<td>580 - 690</td>
</tr>
<tr>
<td>English</td>
<td>22 - 29</td>
<td></td>
</tr>
</tbody>
</table>

Shows middle 50% of testing range

http://www.collegeportraits.org/MI/Michigan-Tech/undergrad_admissions 8/1/2012
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Sticker Price: How much does it cost on average?

Typical Undergraduate Costs for 2011-12 without Financial Aid (Full-Time, In-State Students)

- Tuition (in-state) $12,615.00
- Room & Board (on campus) $8,648.00
- Other expenses (books, transportation, etc..) $3,656.00
- Required Fees $238.00

Total Typical Cost of Attendance: $25,157.00

Out-of-State & Other Costs

More Information

The cost to attend Michigan Technological University varies based on the individual circumstances of students and may be reduced through grants and scholarships.

How much would I pay?

Financial Aid: How much help is there to pay?

Scholarships & Grants

- 51% of 2011-12 full-time undergraduates received need-based grants or scholarships; the average award for the year was $5,675.00. Scholarships and grants are financial aid that does not need to be repaid and is sometimes referred to as gift aid.
Annual Need-Based Loans

- 57% of 2011-12 full-time undergraduates received need-based work-study and/or loans (not including parent loans); the average loan for the year was $4,664.00. Loans need to be repaid. Typically, repayment starts once you are no longer enrolled full-time. Please refer to page 12 of the Funding Education Beyond High School guide on the US Department of Education’s Federal Student Aid website for more information about Financial Need.

Percent of 2010 Full-time Beginning Students Receiving Each Type of Financial Aid

- Any Student Financial Aid: 97%
- Any Grants or Scholarships: 93%
- Federal Grants: 30%
- Pell Grants: 28%
- State/Local Grants or Scholarships: 27%
- Institution Grants or Scholarships: 92%
- Student Loans: 69%

NOTE: Students may receive aid from more than one source.
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Michigan Tech Classes & Instructors

<table>
<thead>
<tr>
<th>Classroom Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students per Faculty</td>
</tr>
<tr>
<td>Undergraduate classes with fewer than 30 students</td>
</tr>
<tr>
<td>Undergraduate classes with fewer than 50 students</td>
</tr>
<tr>
<td>Total Full-Time Instructional Faculty</td>
</tr>
<tr>
<td>% of Full-Time Instructional Faculty Who Are Female</td>
</tr>
<tr>
<td>% of Full-Time Instructional Faculty Who Are Persons of Color</td>
</tr>
<tr>
<td>% of Full-Time Instructional Faculty Who Have the Highest Academic Degree Offered in Their Field of Study</td>
</tr>
</tbody>
</table>

More Information

Campus-based Housing

92% of new freshmen live in campus-based housing or residence halls.
45% of all undergraduates live on campus

More Information

Campus Safety

Michigan Tech takes every precaution to ensure a safe and supportive learning environment. Our robust emergency plan continually educates the campus community, is able to disseminate information accurately and rapidly, and is tested regularly. All students, faculty, and staff receive a Guide to Emergency Procedures, and the campus community is urged to review safety information on the “Safety First” website. Our Public Safety and Police Services Department works closely and constructively with local law enforcement agencies and University officials on a continual basis. Michigan Tech students, faculty, and staff recently formed an on-campus medical response group. This group is made up of over 30 registered volunteers who are available to respond around-the-clock to provide basic life support medical services.

http://www.collegeportraits.org/MI/Michigan-Tech/campus_life
Carnegie Classification of Institutional Characteristics

The Carnegie Classification’s were created “to reference the great diversity of colleges and universities in the United States, and ... enable [people] to identify groups of roughly comparable institutions.” For information on the Carnegie Classifications system, please visit their website: http://classifications.carnegiefoundation.org/

Basic Type
Research Universities (high research activity)

Size and Setting
Medium four-year, primarily residential

Enrollment Profile
High undergraduate

Undergraduate Profile
Full-time four-year, more selective, lower transfer-in

Undergraduate Instructional Program
Professions focus, some graduate coexistence

Graduate Instructional Program
Doctoral, STEM dominant

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Student Activities and Involvement at Michigan Tech

Students who are actively involved in their own learning and development are more likely to be successful in college. Colleges and universities offer students a wide variety of opportunities both inside and outside the classroom to become engaged with new ideas, people, and experiences. Institutions measure the effectiveness of these opportunities in a variety of ways to better understand what types of activities and programs students find the most helpful.

Institutions participating in the VSA program measure student involvement on campus using one of four national surveys. Results from the one survey are reported for a common set of questions selected as part of VSA. Following are the selected results from the National Survey of Student Engagement (NSSE). The questions have been grouped together in categories that are known to contribute to student learning and development. The results reported below are based on the responses of seniors who participated in the survey.

Group Learning Experiences

- 99% percent of seniors worked with classmates on assignments outside of class.
- 81% of seniors tutored or taught other students
- 51% of seniors spent at least 6 hours per week participating in co-curricular activities such as student organizations and intramural sports

Active Learning Experiences

- 94% of seniors spent at least 6 hours per week preparing for class
- 27% of seniors worked on a research project with a faculty member
- 68% of seniors participated in an internship, practicum, or field experience
- 67% of seniors participated in community service or volunteer work
- 10% of seniors participated in study abroad
- 96% of seniors made at least one class presentation last year

Institutional Commitment to Student Learning and Success

- 94% of seniors believe this institution provides support for student success
- 76% of seniors rated the quality of academic advising at this institution as good or excellent
- 62% of seniors reported that this institution provided help in coping with work, family and other non-academic responsibilities
- 91% of seniors reported working harder than they thought they could to meet an instructor's standards or expectations

Student Interaction with Campus Faculty and Staff

- 61% of seniors believed that the campus staff were helpful, considerate, or flexible
- 76% of seniors believed that faculty are available, helpful, or sympathetic

http://www.collegeportraits.org/MI/Michigan-Tech/student_experiences 8/1/2012
• 96% of seniors reported that faculty members provided prompt feedback on their academic performance
• 70% of seniors discussed readings or ideas with faculty members outside of class

Experiences with Diverse Groups of People and Ideas

• 54% of seniors reported that they often tried to understand someone else's point of view
• 78% of seniors reported their experience at this institution contributed to their understanding people of other racial
  and ethnic backgrounds
• 43% of seniors often had serious conversations with students of a different race or ethnicity

Student Satisfaction

• 85% of seniors would attend this institution if they started over again
• 88% of seniors rated their entire educational experience as good or excellent
• 86% of seniors reported that other students were friendly or supportive

Evaluation of Experiences

Survey Administration Process

Survey Information

http://www.collegeportraits.org/MI/Michigan-Tech/student_experiences
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Majors and Degrees

Degrees awarded at Michigan Technological University in 2010-11

<table>
<thead>
<tr>
<th>Degree Level</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associate's</td>
<td>3</td>
</tr>
<tr>
<td>Bachelor's</td>
<td>1,026</td>
</tr>
<tr>
<td>Master's</td>
<td>269</td>
</tr>
<tr>
<td>Doctoral</td>
<td>55</td>
</tr>
<tr>
<td>Total</td>
<td>1,353</td>
</tr>
</tbody>
</table>

More Information

Areas of Study with the largest number of bachelor's degrees awarded in 2010-11

<table>
<thead>
<tr>
<th>Area of Study</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mechanical Engineering</td>
<td>20%</td>
</tr>
<tr>
<td>Civil Engineering</td>
<td>9%</td>
</tr>
<tr>
<td>Electrical, Electronics and Communications Engineering</td>
<td>8%</td>
</tr>
<tr>
<td>Chemical Engineering</td>
<td>6%</td>
</tr>
<tr>
<td>Business Administration, Management and Operations</td>
<td>6%</td>
</tr>
</tbody>
</table>

Links to degree programs at Michigan Technological University

Future Plans of Bachelor's Degree Recipients

Survey Response Rate: 69%

Employment: 78%
Survey Administration Process
More Information
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Student Success & Progress Rate

First Time Full-Time Students Starting Fall 2005

4 Years Later

Still Enrolled at Another Institution: 87.9%
Still Enrolled at Michigan Tech: 65%
Graduated at Another Institution: 10%
Graduated from Michigan Tech: 4%

6 Years Later

Still Enrolled at Another Institution: 85.2%
Still Enrolled at Michigan Tech: 75%
Graduated at Another Institution: 10%
Graduated from Michigan Tech: 4%

Full Time Transfer Students Starting Fall 2005

4 Years Later

Still Enrolled at Another Institution: 91.6%
Still Enrolled at Michigan Tech: 10%
Graduated at Another Institution: 5%
Graduated from Michigan Tech: 4%

6 Years Later

Still Enrolled at Another Institution: 89.8%
Still Enrolled at Michigan Tech: 80%
Graduated at Another Institution: 10%
Graduated from Michigan Tech: 4%
A 88% four-year success and progress rate means that 88% of students starting in Fall 2005 either graduated or are still enrolled at a higher education institution four years later.

Counts for the Fall 2005 entering class shown in the graph above.

- 1,324 First-Time, Full-Time Students
- 206 Full-Time Transfer Students

Success & Progress Rate Table

Retention of Freshman Class

First-time students in Fall 2010 that returned for their second year: 83%
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Success and Progress Rate Table

Michigan Technological University
First-Time, Full-Time Students

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>% Graduated from Michigan Technological University with 4-year degree</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.2%</td>
<td>25.2%</td>
<td>57.8%</td>
<td>64.9%</td>
</tr>
<tr>
<td>% Graduated from other institution with 4-year degree</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.1%</td>
<td>1.7%</td>
<td>4.8%</td>
<td>6.6%</td>
</tr>
<tr>
<td>% Graduated with 2-year degree</td>
<td>0.0%</td>
<td>0.4%</td>
<td>0.7%</td>
<td>1.2%</td>
<td>1.3%</td>
<td>1.3%</td>
</tr>
<tr>
<td>Total % Graduated</td>
<td>0.0%</td>
<td>0.4%</td>
<td>1.0%</td>
<td>28.1%</td>
<td>63.9%</td>
<td>72.8%</td>
</tr>
<tr>
<td>% Enrolled at Michigan Technological University</td>
<td>100.0%</td>
<td>82.3%</td>
<td>74.4%</td>
<td>45.4%</td>
<td>11.8%</td>
<td>3.5%</td>
</tr>
<tr>
<td>% Enrolled at other 4-year institutions</td>
<td>0.0%</td>
<td>0.5%</td>
<td>1.5%</td>
<td>2.9%</td>
<td>4.4%</td>
<td>5.3%</td>
</tr>
<tr>
<td>% Enrolled at other 2-year institutions</td>
<td>0.0%</td>
<td>5.2%</td>
<td>5.9%</td>
<td>4.7%</td>
<td>3.7%</td>
<td>2.9%</td>
</tr>
<tr>
<td>Total % Enrolled</td>
<td>100.0%</td>
<td>93.6%</td>
<td>89.3%</td>
<td>59.8%</td>
<td>23.1%</td>
<td>12.4%</td>
</tr>
<tr>
<td>Student Success &amp; Progress</td>
<td>100.0%</td>
<td>94.0%</td>
<td>90.3%</td>
<td>87.9%</td>
<td>87.0%</td>
<td>85.2%</td>
</tr>
</tbody>
</table>

First-Time, Full-Time Transfer Students

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>% Graduated from Michigan Technological University with 4-year degree</td>
<td>0.5%</td>
<td>6.8%</td>
<td>42.2%</td>
<td>66.5%</td>
<td>72.8%</td>
<td>76.7%</td>
</tr>
<tr>
<td>% Graduated from other institution with 4-year degree</td>
<td>0.0%</td>
<td>0.5%</td>
<td>1.5%</td>
<td>2.9%</td>
<td>4.4%</td>
<td>5.3%</td>
</tr>
<tr>
<td>% Graduated with 2-year degree</td>
<td>0.5%</td>
<td>1.0%</td>
<td>1.9%</td>
<td>1.9%</td>
<td>1.9%</td>
<td>1.9%</td>
</tr>
<tr>
<td>Total % Graduated</td>
<td>1.0%</td>
<td>8.3%</td>
<td>45.6%</td>
<td>71.3%</td>
<td>79.1%</td>
<td>83.9%</td>
</tr>
<tr>
<td>% Enrolled at Michigan Technological University</td>
<td>99.0% 81.1% 38.8% 13.1% 5.8% 1.0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% Enrolled at other 4-year institutions</td>
<td>0.0% 3.9% 5.3% 5.3% 4.9% 3.9%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% Enrolled at other 2-year institutions</td>
<td>0.0% 2.4% 2.9% 1.9% 1.9% 1.0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total % Enrolled</td>
<td>99.0% 87.4% 47.0% 20.3% 12.6% 5.9%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student Success &amp; Progress</td>
<td>100.0% 95.7% 92.6% 91.6% 91.7% 89.8%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Student Learning at Michigan Technological University

All colleges and universities use multiple approaches to measure student learning. Many of these are specific to particular disciplines, many are coordinated with accrediting agencies, and many are based on outcomes after students have graduated.

Michigan Tech seeks continuous improvement of its educational programs (and other processes) through external accreditation by the Higher Learning Commission of the North Central Association of Colleges and Schools. The Accreditation Board for Engineering and Technology accredits ten engineering programs and two technology programs. The Association to Advance Collegiate Schools of Business accredits our School of Business and Economics bachelor’s degrees. The Society of American Foresters accredits the forestry program; the American Chemical Society certifies chemistry programs; and the National Accrediting Agency for the Clinical Laboratory Sciences accredits clinical lab science. The Michigan Board of Education accredits our teacher certification programs. For internal assessment of student learning, faculty set broad goals such as a unified and integrated understanding of their field; skills for critical thinking; and good oral and written communications. Using samples of student work, special exams, and student interviews, we identify opportunities for curricular improvement by measuring the success of students as a group and analyzing results at every level.

Learning Assessment Examples

Pilot Project to Measure Core Learning Outcomes

Colleges and universities participating in the College Portrait measure the typical improvement in students' abilities to think, reason, and write using one of three tests. This is part of a pilot project to better understand and compare what students learn between their freshman and senior years at different colleges and universities.

This university is in the process of collecting and analyzing learning outcomes test results.