Michigan Technological University

Michigan Tech was founded in 1885 in response to the first mining boom in the US — the rush for copper, which came a few years before the California gold rush. At first, the college trained mining and metallurgical engineers. Today, we offer certificates, associate’s, bachelor’s, master’s, and doctoral degrees in arts, humanities, and social sciences; business and economics; computing; engineering, forestry and environmental science, natural and physical sciences; and technology. 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. Our students are prepared to make a difference in the world; they are lifelong learners and innovators who create the future.

The Huskies Community

At Michigan Tech, students have a unique opportunity to join an Enterprise team and manage their own company, using industry funding to solve real problems for their sponsors. The Pavlis Institute for Global Technological Leadership, the Honors Institute, and the Senior Design capstone program provide leadership training, both locally and internationally. Tech has more Peace Corps Master’s International programs and participants than any other university in the US, and our Graduate School continues to grow, especially at the doctoral level. Michigan Tech is on the scenic Keweenaw Peninsula, where students enjoy on-campus biking and jogging trails and our own golf course. Winter brings Nordic skiing, downhill skiing on our own ski slope, and snowboarding. Our renowned Winter Carnival features competition involving more than 150 student groups building massive snow statues. The Rozsa Center for the Performing Arts hosts cultural events, and Huskies athletics include NCAA Division I men’s ice hockey, Division II football, men’s and women’s basketball, tennis, track and field, Nordic skiing, cross country, and women’s volleyball.

Carnegie Classification of Institutional Characteristics

**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, high graduate coexistence

**Graduate Instructional Program**  
Doctoral, STEM dominant

**NOTE:** Institutional classifications based on the Carnegie 2005 edition.
Student Characteristics (Fall 2008)

Student Level and Enrollment Status

<table>
<thead>
<tr>
<th></th>
<th>Full-time</th>
<th>Part-time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate</td>
<td>5,585</td>
<td>449</td>
</tr>
<tr>
<td>Graduate/Professional</td>
<td>275</td>
<td>709</td>
</tr>
</tbody>
</table>

Total Students: 7,018

Undergraduate Profile

<table>
<thead>
<tr>
<th>Category</th>
<th>Total Undergraduate Students</th>
<th>Gender</th>
<th>Race/Ethnicity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Women  1,410 23%</td>
<td>African American / Black 101 2%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Men    4,624 77%</td>
<td>American Indian / Alaskan Native 45 1%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Asian / Pacific Islander 66 1%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Hispanic       64 1%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>International  397 7%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>White          5,034 83%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Race/Ethnicity Unknown 327 5%</td>
</tr>
</tbody>
</table>

Geographic Distribution (Degree-Seeking)

<table>
<thead>
<tr>
<th>Region</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michigan</td>
<td>72%</td>
</tr>
<tr>
<td>Other US States &amp; Territories</td>
<td>22%</td>
</tr>
<tr>
<td>Other Countries</td>
<td>7%</td>
</tr>
</tbody>
</table>

Age (Degree-Seeking)

Average Age: 21
Percent of Undergraduates Age 25 or Older: 5%
Undergraduate Success and Progress Rate

As an example, a 75% four-year success and progress rate means that 75% of students starting in Fall 2002 either graduated or are still enrolled at a higher education institution four years later.

Counts for the Fall 2002 entering class shown in the graph above.

1,190 First-Time, Full-Time Students
215 Full-Time Transfer Students

Retention of Fall 2007 First-Time, Full-time Students

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Costs of Attendance and Financial Aid

Typical Undergraduate Costs per Year without Financial Aid (Full-Time, In-State Students)

- Tuition (in-state), $9,930
- Room & Board (on campus), $7,738
- Required Fees, $831
- Other expenses (books, transportation, etc.), $3,440

Cost of attendance for the following academic year will be available by approximately July 1st. The cost to attend Michigan Technological University varies based on the individual circumstances of students and may be reduced through grants and scholarships.

Financial Aid Awarded to Undergraduates

- Annual Need-Based Scholarships & Grants
  - 44% of 2008-09 Estimated full-time undergraduates received need-based grants or scholarships; the average award for the year was $4,475
- Annual Need-Based Loans
  - 49% of 2008-09 Estimated full-time undergraduates received need-based work-study and/or loans (not including parent loans) the average loan for the year was $4,535

Percent of 2006-07 First-Time Students Receiving Each Type of Financial Aid

- State Grants: 63%
- Federal Grants: 20%
- Student Loans: 62%
- Institutional Aid/ Scholarships: 64%
- Any Type of Financial Aid: 100%

NOTE: Students may receive aid from more than one source.
Academic Preparation of New Freshmen

Test(s) Required for Admission: SAT or ACT recommended

<table>
<thead>
<tr>
<th>Middle 50% of Test Score Range</th>
<th>ACT</th>
<th>SAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Composite</td>
<td>23 - 28</td>
<td>570 - 700</td>
</tr>
<tr>
<td>Math</td>
<td>24 - 29</td>
<td>530 - 650</td>
</tr>
<tr>
<td>English</td>
<td>21 - 27</td>
<td></td>
</tr>
<tr>
<td>Critical Reading</td>
<td></td>
<td>530 - 650</td>
</tr>
</tbody>
</table>

50% of admitted students have test scores within the ranges listed, 25% have scores above, and 25% have scores below.

High School Background

| Percent in top 25% of High School Graduating Class | 57%         |
| Percent in top 50% of High School Graduating Class | 87%         |
| Percent of New Freshmen who submitted HS Class Rank | 87%         |
| Average High School GPA (4-point scale)         | 3.52        |
| Percent who submitted High School GPA            | 96%         |

Study At Michigan Tech

Classroom Environment

<table>
<thead>
<tr>
<th>Students per Faculty</th>
<th>15 to 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate classes with fewer than 30 students</td>
<td>68%</td>
</tr>
<tr>
<td>Undergraduate classes with fewer than 50 students</td>
<td>88%</td>
</tr>
</tbody>
</table>

Full-Time Instructional Faculty

| Total Faculty | 362       |
| % Women       | 27%       |
| % from Minority Groups | 14%       |
| % with Highest Degree in Field | 86%       |
Student Housing
91% of new freshmen live on campus
45% of all undergraduates live on campus

Campus Safety
Michigan Tech takes every precaution to ensure a safe and supportive learning environment. We recently were ranked by Reader’s Digest as the third safest campus in the nation. Our robust emergency plan continually educates the campus community and is able to disseminate information accurately and rapidly. Residence hall students receive a Guide to Emergency Procedures, and the campus community is urged to review safety information on the “Safety First” website. Our Public Safety Department works closely and constructively with local law enforcement agencies on a continual basis.

Degrees and Areas of Study

<table>
<thead>
<tr>
<th>Degrees awarded at Michigan Technological University in 2007-08</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Associate's</td>
<td>20</td>
</tr>
<tr>
<td>Bachelor's</td>
<td>1,146</td>
</tr>
<tr>
<td>Master's</td>
<td>196</td>
</tr>
<tr>
<td>Doctoral</td>
<td>54</td>
</tr>
<tr>
<td>Total</td>
<td>1,416</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Areas of study with the largest number of undergraduate degrees awarded in 2007-08</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mechanical Engineering                                                       22%</td>
</tr>
<tr>
<td>Civil Engineering                                                             10%</td>
</tr>
<tr>
<td>Business Administration, Management and Operations                          10%</td>
</tr>
<tr>
<td>Electrical, Electronics and Communications Engineering                       10%</td>
</tr>
<tr>
<td>Computer Engineering, General                                                 4%</td>
</tr>
</tbody>
</table>
Future Plans of Bachelor's Degree Recipients

- Employment: 77%
- Graduate Study: 17%
- Misc: 6%

Misc Values:
- 0% Starting or Raising a Family
- 1% Military
- 0% Volunteer Service
- 0% Add'l Undergrad Study
- 5% Other
Student Experiences and Perceptions

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

- 89% percent of seniors worked with classmates on assignments outside of class.
- 78% of seniors tutored or taught other students
- 48% of seniors spent at least 6 hours per week participating in co-curricular activities such as student organizations and intramural sports

Active Learning Experiences

- 87% of seniors spent at least 6 hours per week preparing for class
- 24% of seniors worked on a research project with a faculty member
- 62% of seniors participated in an internship, practicum, or field experience
- 62% of seniors participated in community service or volunteer work
- 12% of seniors participated in study abroad
- 94% of seniors made at least one class presentation last year

Institutional Commitment to Student Learning and Success

- 96% of seniors believe this institution provides support for student success
- 72% of seniors rated the quality of academic advising at this institution as good or excellent
- 58% 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

- 55% of seniors believed that the campus staff were helpful, considerate, or flexible
- 76% of seniors believed that faculty are available, helpful, or sympathetic
- 95% of seniors reported that faculty members provided prompt feedback on their academic performance
- 68% of seniors discussed readings or ideas with faculty members outside of class

Experiences with Diverse Groups of People and Ideas

- 52% of seniors reported that they often tried to understand someone else's point of view
- 76% of seniors reported their experience at this institution contributed to their understanding people of other racial and ethnic backgrounds
- 39% of seniors often had serious conversations with students of a different race or ethnicity

Student Satisfaction

- 83% of seniors would attend this institution if they started over again
- 86% of seniors rated their entire educational experience as good or excellent
- 87% of seniors reported that other students were friendly or supportive
Student Learning Outcomes

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. In addition, those institutions participating in the VSA measure increases in critical thinking, analytic reasoning, and written communication using one of three tests.

Student Learning Assessment at Michigan Technological University

Michigan Tech seeks continuous improvement of its educational programs (and other processes) through external accreditation by AQIP (the Academic Quality Improvement Program). The Accreditation Board for Engineering and Technology accredits 10 engineering programs and 3 technology programs. The Association to Advance Collegiate Schools of Business accredits our BSBA degree. 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.

Pilot Project to Measure Core Learning Outcomes

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