Transform summer boredom into an . . . EPIC experience!
It’s true—our programs aren’t ordinary, and neither are our students. They’re performing chemical diagnostics, making movies, and launching hand-built rockets. They come from across the country and around the world to learn engineering, digital photography, and molten metal casting—in an adventurous and fun way.

For more than 40 years, Michigan Tech faculty, graduate students, role models, and other professionals lead Summer Youth Programs for students completing grades 6–11—built around hands-on activities, field trips, and team projects. Ready to learn more?

Your next summer adventure begins here . . .
Who can attend Michigan Tech Summer Youth Programs?

Students completing grades 6–11 are eligible to attend Michigan Tech’s Summer Youth Programs. Middle school and high school courses offer students exciting, hands-on explorations on a variety of topics. Middle school courses are open to students completing grades 6–8 and provide an engaging introduction to the subject. High school courses, open to those completing grades 9–11, encourage students to explore a field of study they are interested in pursuing in college. Academically high-achieving students can also apply for Michigan Tech’s Competitive Scholarship Programs, which focus on specific areas of study.

How many participants are in each exploration?

Explorations are limited to 20 or fewer students to enable instructors to give one-on-one instruction. Some courses are kept smaller to ensure safety. We train and employ more than 150 instructors, activity counselors, residence counselors, and staff. We intentionally keep our student-to-staff ratio low, at about 10:1.

What is the daily schedule?

(Note: The Competitive Scholarship Programs schedule may differ.)

**Sunday**

10:00 AM–2:00 PM  Registration and activities  
11:00 AM–1:00 PM  Brunch  
Noon and 1:00 PM  Campus tour (parents welcome)  
3:00 PM  Mandatory orientation and commuter meeting (parents welcome)  
4:00–6:00 PM  Dinner  
6:00–9:30 PM  Recreational activities  
9:30 PM  On-floor time, get-to-know-you meeting  
10:45 PM  In-room quiet time

**Monday–Friday**

7:00–9:00 AM  Breakfast  
9:00 AM–Noon  Exploration sessions  
Noon–1:00 PM  Lunch  
1:15–4:30 PM  Exploration sessions  
4:30–6:00 PM  Dinner (Friday: checkout begins after program wrap-up)  
6:00–10:00 PM  Recreational activities/supervised free time (Friday: block party)  
10:00 PM  On-floor time  
10:45 PM  In-room quiet time

What will I be doing in the evenings?

Everything! Our full-time counselors plan and lead so many evening and weekend activities, you won’t have a minute to be bored. A few activities, like going for ice cream or to the movies, have a minimal charge, but most are free. You can:

- Go bowling  
- See a movie  
- Play board games  
- Play basketball, volleyball, soccer, and tennis  
- Perform in a variety show  
- Play 4-square/ladder ball  
- Do arts and crafts, like tie-dye and make jewelry  
- Tour the Keweenaw Peninsula  
- Swim (pool or beach)  
- Play Ultimate Frisbee  
- Golf (bring your clubs)  
- Fish (bring your pole and license)  
- Dance  
- Hike and jog on the waterfront  
- Shop at the Campus Bookstore and local stores  
- Make fast-food runs  
- Hang out with friends  
- Relax in the Michigan Tech Library  
- Mountain bike  
- Explore a state park
If I stay for more than one exploration, do I have to leave campus during the weekend?

For participants who elect to come for two or more consecutive weeks of Summer Youth Programs, we offer exciting weekend activities. Stay-over fees are $125 per weekend and include meals, lodging, and supervised excursions. Weekend activities include beach barbecues, copper mine tours, a trip to historic Fort Wilkins State Park, hiking, kayaking, boat tours, and more.

Who will I room with?

Our residence halls are divided by gender, and we take great care to match each participant with a roommate who is close in age, but from a different place.

We encourage participants to broaden their horizons and room with someone new. However, some students prefer rooming with someone they already know, like a sibling or friend. These requests are honored whenever possible. Both friends must request each other on the appropriate form in their confirmation packets. If you request to room with a friend but your friend does not request you, you will not be placed together. It will not be possible to switch rooms when you arrive.

Where will I stay?

Our live-in participants enjoy a taste of campus living in Michigan Tech’s largest residence hall, Wadsworth Hall. Staff and participants are housed in self-contained, secure areas. Participants have access to residence hall laundry facilities (minimal fee), recreation areas, and lounges. We have full-time, live-in counselors who provide supervision, interact with participants, and help ensure safety.

Where can my family stay in the area?

Many people make a family vacation out of their trip to Michigan Tech. The area is known for its scenic beaches and waterfalls, unique shopping, historical downtowns, and tourist attractions. Cottages, hotels, bed and breakfasts, and camping facilities are available in the immediate area. For more information, visit www.keweenaw.info.

Where is Michigan Tech?

Michigan Tech is located in Houghton, Michigan, near the shores of Lake Superior in the beautiful Upper Peninsula.

What are my options for traveling to Michigan Tech?

Making your transportation arrangements early helps ensure smooth travels and allows our staff to prepare for your arrival. You can choose to travel to Michigan Tech by Summer Youth Programs Charter Bus, car, or plane.

**Summer Youth Programs Charter Bus:** Michigan Tech offers a chaperoned charter bus service from select locations in the Midwest—tentatively Lansing, Detroit, Bay City, Gaylord, Kalamazoo*, Chicago*, Milwaukee*, Green Bay*, and Iron Mountain*. Space is available on a first-come, first-served basis, with preference given to round-trip riders. Students are picked up on Saturday evening and travel through the night, arriving on campus on Sunday morning. This is the most popular way for students to travel; you have the opportunity to meet staff and fellow students before arriving at Michigan Tech. Fees are:

- Round-trip fee of $275—Includes a $25 nonrefundable registration and processing fee. No refunds after June 1. You may choose to be picked up and dropped off at different locations and still qualify for the round-trip rate.
- One-way fee of $175—Includes a $25 nonrefundable registration and processing fee. No refunds after June 1.

Charter bus payments must be paid in full within 10 days of purchase. Charter transportation requests are not guaranteed until you receive confirmation from SYP. If you request a seat after we have reached full capacity, you will receive a full refund of any transportation fees paid (including the $25 registration and processing fee).

*July 10–23 only

**Car:** Students often choose to travel to campus with family. The local area offers beautiful scenery, attractions, and lodging options for families if they choose to stay for the duration of the program. Directions and lodging information can be found at www.mtu.edu/admissions (see Visiting Campus).

Students are not permitted to drive during our programs, so those arriving alone by car will need to purchase a $15 parking pass, be assigned a parking area, and their keys will be stored in the SYP safe.

**Air:** Houghton County Memorial Airport (CMX) is only a 15-minute drive from campus and is serviced by United Airlines. Students who fly to Houghton will be met and transported to Michigan Tech by Summer Youth Programs staff members wearing official shirts and name tags. Visit www.united.com for more information on flights.
FREQUENTLY ASKED QUESTIONS

Can I commute?

Programs are available at a reduced fee for students who wish to provide their own daily transportation. Lunch is included, and commuters are strongly encouraged to attend evening recreational activities. Commuters must reside with adults (parents, relatives, or family friends). The Summer Youth Programs office will need the student’s local address and phone number, and the participant must agree to follow all of the live-in student rules while on campus.

Note: Several of our explorations involve travel or late-evening activities and are not available to commuters. See exploration descriptions for details.

How much do Summer Youth Programs cost?

We remain one of the most affordable programs in the nation, and we work to keep our costs low so our programs are accessible to as many people as possible. Fees vary; please see exploration descriptions for specific costs.

- **MIDDLE SCHOOL AND PRE-COLLEGE EXPLORATIONS—LIVE-IN**
  SYP WEEKS 1, 2, 3 (JULY 10–30): $895 PER EXPLORATION
  A nonrefundable $100 registration and processing fee per exploration is required to guarantee your enrollment; please pay your fee online, by phone, or by mail within 10 days of submitting your online or paper application.

- **MIDDLE SCHOOL AND PRE-COLLEGE EXPLORATIONS—COMMUTER**
  SYP WEEKS 1, 2, 3 (JULY 10–30): $475 PER EXPLORATION
  A nonrefundable $100 registration and processing fee per exploration is required to guarantee your enrollment; please pay your fee online, by phone, or by mail within 10 days of submitting your online or paper application.

- **COMPETITIVE SCHOLARSHIP PROGRAMS**
  Available to students completing grades 9–11 only. Women in Engineering and the Engineering Scholars Program have a $295 nonrefundable registration fee (due upon acceptance). Women in Computer Science has a $100 nonrefundable registration fee (due upon acceptance). Rail and Intermodal Transportation has a $450 nonrefundable registration fee (due upon acceptance). Women in Automotive Engineering has a $200 nonrefundable registration fee (due upon acceptance). Do not send payment with your application. To complete your enrollment, your registration fee will be due within 10 days of being accepted into the program. You will be notified about acceptance in mid-May.

- **STAY-OVER FEE: $125 PER WEEKEND**
  Stay-overs are available to students registered for two or more consecutive weeks who wish to remain on campus during the weekend. This fee includes room and board, activities, and supervised excursions to local attractions. No stay-overs on July 2 or July 30.

- **EARLY ARRIVAL/LATE DEPARTURE: $75 PER DAY**
  This fee includes room and board, supervision, and activities. Students must obtain prior approval from the SYP office. No late departures on July 2 or July 30.

Are there discounts available for attending multiple explorations?

Yes, students attending more than one week of Summer Youth Programs will receive a $50 discount for each additional week after the first. Please note the discount on your payment form.

Do you offer financial awards?

Yes, there are several awards available to Summer Youth Programs participants.

- **MICHIGAN TECH ALUMNI/STAFF AWARD**
  Children and grandchildren of Michigan Tech alumni and staff are eligible for one $50 award (per child) each summer, applied after confirmation is received from Human Resources or the Michigan Tech Alumni Association. Not applicable to Competitive Scholarship Programs.

- **MICHIGAN TECH SCHOLARSHIPS**
  If you enroll at Michigan Tech in the fall of 2016, you will be eligible to apply for undergraduate scholarships exclusively available to SYP participants. Visit [www.mtu.edu/finaid/students/current/sydia](http://www.mtu.edu/finaid/students/current/sydia) for details.

Can I cancel my enrollment?

If you cancel your exploration before June 1, 2016, you are eligible for a refund of enrollment fees minus the nonrefundable registration and processing fee for each exploration. There are no refunds after June 1.

What happens if my exploration is canceled?

In the unlikely event that your exploration is canceled by SYP, we will assist you in selecting another exploration or will refund your entire payment.
What if my program is full?

We are happy to help you find another exploration that fits your interests. If you prefer, we can place your name on a waiting list and notify you if space becomes available. If you haven’t been transferred from a waiting list to an exploration by the start of the program, your entire payment (including the registration and processing fee) will be refunded.

Is there recognition for my participation?

Upon successful completion of your program, you will be awarded a certificate. We recommend you put it in your high school portfolio. You may wish to refer to it when applying for jobs, colleges, or honors programs.

After I apply, what’s next?

You will receive a personalized confirmation packet once we receive your application and deposit. In it, you’ll find important forms that must be completed and returned. Closer to the start of your program, you’ll receive a welcome packet with information about registration, campus life, what to bring, and more. Keep this packet for your reference.

How can I contact Summer Youth Programs?

Michigan Tech Summer Youth Programs
1400 Townsend Drive
Houghton, MI 49931-1295
www.syp.mtu.edu
Email syp@mtu.edu
Telephone 906-487-2219
Fax 906-487-1136
Toll-free 1-888-773-2655

CHECK THE SUMMER YOUTH PROGRAMS WEBSITE OFTEN—NEW EXPLORATIONS CONTINUE TO BE ADDED!
Students are selected for scholarship programs on a competitive basis. To apply for a scholarship program, visit [www.syp.mtu.edu](http://www.syp.mtu.edu) and complete the application form for the program you’re interested in. Submit your application along with a teacher recommendation, your unofficial transcript, and your responses to the short essay questions. Applications will be reviewed by our selection committee in April; you will be notified of our decision in mid-May. Programs have varying deadlines; please verify application due dates listed beneath each program title. For more information, please see our website.

**Engineering Scholars Program (ESP)**
Capacity: 150

**51773 • Grades 9–11 • June 26–July 2, 2016**

*Application deadline is April 1, 2016 at 5:00 PM. For early acceptance, please submit application by March 1, 2016.*

*Cost: A nonrefundable registration fee of $295 is due within 10 days of acceptance.*

The Engineering Scholars Program (ESP) provides an opportunity for students to explore various fields of engineering through hands-on projects and classroom investigations. Explore real engineering labs, meet and interact with leaders and role models, and take exciting trips throughout the beautiful Keweenaw Peninsula—all while learning about career opportunities and meeting other talented students with similar interests.

This program is an investigation of careers in areas including mechanical, computer, environmental, electrical, chemical, civil, geological, and materials engineering.

- Explore engineering by constructing a building that withstands an earthquake and creating your own message encryptor (share secrets only your friends can read).
- Get the inside scoop from role models working in engineering fields.
- Work in teams to complete engineering projects.
- Learn about the college application process and get tips for succeeding in university engineering programs.
- Experience college life—stay in a residence hall, explore campus, and meet others with similar backgrounds and interests.

Please note the program schedule is intense, but provides a unique chance to discover the opportunities careers in engineering and related disciplines offer. The scholarship is valued at more than $1,000 and covers tuition, room and board, and supplies.

**Junior Women in Engineering (JWIE)**
Capacity: 15

**52336 • Grades 6–8 • July 24–30, 2016**

*Application deadline is April 1, 2016 at 5:00 PM.*

*Cost: A nonrefundable registration fee of $295 is due within 10 days of acceptance.*

The Junior Women in Engineering (JWIE) provides an opportunity for academically talented young women to explore a variety of disciplines, including mechanical, electrical, chemical, civil, and environmental engineering. Tour engineering labs, meet and interact with female leaders and role models, and take exciting trips throughout the beautiful Keweenaw Peninsula—all while investigating career opportunities and meeting other students with similar interests.

Please note the program schedule is intense, but provides a unique chance to discover the opportunities careers in engineering and related disciplines offer. The scholarship is valued at more than $1,000 and covers tuition, room and board, and supplies.

**National Summer Transportation Institute (NSTI)**
Capacity: 30

**51490 • Grades 9–11 • July 10–23, 2016**

*Application deadline is May 1, 2016 at 5:00 PM.*

The National Summer Transportation Institute (NSTI) is an exploration of modern transportation, including air, rail, road, and water. Travel to exciting locations including the Soo Locks shipping canal between Lake Superior and the Lower Great Lakes, and tour the Mackinac Bridge Authority. Do group projects, meet other talented students, and learn about careers in the transportation industry.

Michigan Tech’s National Summer Transportation Institute is a two-week residential program that allows students to explore today’s top transportation industries.

- Discover whether metal has a memory.
- Design and build bridges, gliders, and prosthetic legs.
- Learn how to purify water.
- Experience college life—stay in a residence hall, explore campus, and meet other young women.
- Travel to Sault Ste. Marie and learn firsthand about the Soo Locks shipping canal, the largest waterway traffic system on Earth.
- Michigan Tech is the only residential host site of this program in Michigan.

Please note the program schedule is intense, but provides a unique chance to discover the opportunities careers in engineering and related disciplines offer. The scholarship is valued at more than $1,000 and covers tuition, room and board, and supplies.
Rail and Intermodal Transportation (RIT)  
51499 • Grades 9–11 • July 17–23, 2016  
Application deadline is May 1, 2016 at 5:00 PM.  
Cost: A nonrefundable $100 registration fee is due within 10 day of acceptance. The remaining balance of $350 is due before June 1.

Explore the exciting world of rail and intermodal transportation. Why are trains called the green transportation alternative? How fast can high-speed passenger trains travel? How do containers find their way from China to the United States? What are the latest developments in alternative fuels and train control systems? Find out the answers to these questions and more! Enjoy technical and hands-on tours of rail and intermodal facilities in Ishpeming/Marquette and Duluth/Superior, where you can pose your questions directly to the experts.

Note: Live-in only; this exploration will travel to various locations including Duluth, Minnesota, with an overnight stay in Superior, Wisconsin.

Women in Automotive Engineering (WIAE)  
52337 • Grades 9–11 • July 24–30, 2016  
Application deadline is April 1, 2016 at 5:00 PM. For early acceptance, please submit application by March 1, 2016.  
Cost: A nonrefundable registration fee of $200 is due within 10 days of acceptance.

The Women in Automotive Engineering (WIAE) is a great opportunity for young women to experience the world of mechanical engineering while focusing on the impact automobiles have on society and the environment. You'll become familiar with what automotive engineers do and the different facets of a career in automotive engineering. The Michigan Tech Mobile Lab will be your learning space for the week; you'll learn about and test engines, electric machines, and infotainment systems. WIAE is a uniquely specialized scholarship program that allows you to learn in the most hands-on way possible.

Women in Computer Science (WICS)  
51869 • Grades 9–11 • June 26–July 2, 2016  
Application deadline is April 1, 2016 at 5:00 PM.  
Cost: A nonrefundable registration fee of $100 is due within 10 days of acceptance.

Women in Computer Science (WICS) is a discovery of computing—a fascinating field that is an integral part of our lives. Experience programming, artificial intelligence, robotics, virtual reality, visualization, networks, and security. Learn about career opportunities in computing and the excellent job prospects in a wide range of industries. Interact with alumni and role models to get firsthand accounts of the diverse careers in computing.

Women in Engineering (WIE)  
51478 • Grades 9–11 • June 19–25, 2016  
Application deadline is April 1, 2016 at 5:00 PM. For early acceptance, please submit application by March 1, 2016.  
Cost: A nonrefundable registration fee of $295 is due within 10 days of acceptance.

The Women in Engineering (WIE) provides an opportunity for academically talented young women to explore various fields of engineering through hands-on projects and classroom investigations. Explore real engineering labs, meet and interact with female leaders and role models, and take exciting trips throughout the beautiful Keweenaw Peninsula—all while investigating career opportunities and meeting other talented students with similar interests.

This program is an investigation of careers in areas including mechanical, computer, environmental, electrical, chemical, civil, geological, and materials engineering.

- Explore engineering by constructing a building that withstands an earthquake and creating your own message encryptor (share secrets only your friends can read).
- Get the inside scoop from female role models working in engineering fields.
- Work in teams to complete engineering projects.
- Learn about the college application process and get tips for succeeding in university engineering programs.
- Experience college life—stay in a residence hall, explore campus, and meet other young women with similar backgrounds and interests.

Please note the program schedule is intense, but provides a unique chance to discover the opportunities careers in engineering and related disciplines offer. The scholarship is valued at more than $1,000 and covers tuition, room and board, and supplies.

Please visit syp.mtu.edu/courses-scholarship.php to download specific scholarship applications and requirements.
ENGINEERING PROGRAMS

Chemical Engineering
51450 • Grades 9–11 • July 10–16, 2016
Cost: Resident $920/Commuter $500
The greatest challenge facing chemical engineers today is producing the products our society demands in a safe and environmentally friendly way. Explore alternative energy, chemical reactions, and separation processes through laboratory activities. Learn about chemical engineering while operating state-of-the-art equipment in our best-in-class labs.
Note: Students should wear long pants and sturdy, closed-toe shoes or boots. Be prepared to get dirty.

Civil Engineering
52330 • Grades 9–11 • July 10–16, 2016
51962 • Grades 6–8 • July 17–23, 2016
Cost: Resident $895/Commuter $475
How do civil engineers design and build skyscrapers? How are bridges strong enough to hold the weight of traffic? Find out the answers to these questions by making and breaking concrete, creating models, and visiting local structures designed by civil engineers.
Note: Students should wear long pants and sturdy, closed-toe shoes or boots. Be prepared to get dirty.

Computer and Electrical Engineering
51451 • Grades 9–11 • July 10–16, 2016
Cost: Resident $895/Commuter $475
Explore the world of computer and electrical engineering through simple circuits and digital logic. Imagine the future full of smart electronics and learn how engineers create them. Perform many experiments that demonstrate the basic principles of computer and electrical engineering, including designing and constructing your own printed circuit board.

Engineering 101
51452 • Grades 6–8 • July 10–16, 2016
51453 • Grades 9–11 • July 17–23, 2016
Cost: Resident $915/Commuter $495
Not sure which engineering area appeals to you? Explore a variety of disciplines, including mechanical, electrical, chemical, civil, and environmental engineering. Discover whether metal has a memory; learn how to purify water; program a robot; and design and build bridges, gliders, and/or prosthetic legs and test them to see how well they perform. You’ll work in teams and approach engineering challenges from a fresh perspective.

Geological Engineering
52339 • Grades 9–11 • July 10–16, 2016
51774 • Grades 6–8 • July 17–23, 2016
Cost: Resident $895/Commuter $475
The Keweenaw Peninsula is called the Copper Country because of its rich deposits of copper. Journey through the incredible history of the Keweenaw’s geology: from the formation of an ancient volcanic rift and its enormous lodes of native copper to the glaciers that uncovered them, as well as the miners who powered the Keweenaw’s copper mining industry through the early 1900s. In the lab, you’ll discover how rocks and minerals are formed and learn to use specialized tools and the scientific method to identify them in the field. Outside (where you'll spend most of the week), you’ll examine geological evidence, map ancient lava flows and rock beds, explore underground mines, and collect samples at old mines and on the beaches of Lake Superior. Sharpen your skills as a geologist to understand the events that shaped the Keweenaw’s landscape into what it is today.

Introduction to Robotics: Manipulators and Underwater Monitoring
52194 • Grades 6–8 • July 10–16, 2016
Cost: Resident $895/Commuter $475
This program is a discovery of the field of robotics from two new perspectives. By working with two of Michigan Tech’s robots (GUPPIE and Neu-pulator), students learn how robots can help explore the environment and augment human capabilities.
Note: This is a regular Summer Youth Programs course, however, students from the Keweenaw Peninsula are eligible for a partial scholarship. Visit www.syp.mtu.edu or email syp@mtu.edu for scholarship information.
Materials Science and Engineering
Capacity: 15 (grades 6–8)
51456 • Grades 6–8 • July 10–16, 2016
51866 • Grades 9–11 • July 24–30, 2016
Cost: Resident $920/Commuter $500

Materials are everywhere, and understanding their basic science allows us to engineer new and improved materials. How do we create materials? And how do we measure their behaviors so we can compare them? Explore these questions using a balanced mixture of science and engineering. Create your own materials, process them by bending and heating, and peer into their structures, which control how they behave.

Note: Students should wear long pants and closed-toe shoes. Bring old clothes and be prepared to get dirty.

Mechanical Engineering—Automotive Engineering
Capacity: 20
51457 • Grades 9–11 • July 10–16, 2016
Cost: Resident $945/Commuter $525

Discover the world of automotive engineering. See the vehicles Michigan Tech student teams design and build for competitions, like the Clean Snowmobile Challenge, Formula SAE, Baja SAE, Hybrid Electric Vehicle, and Supermileage—and tour the facilities where they work. Learn the expanded basics of engines and other vehicle technology.

Mechanical Engineering—Design the Future
Capacity: 20
51950 • Grades 9–11 • July 24–30, 2016
Cost: Resident $945/Commuter $525

Explore different areas of mechanical and machine design, manufacturing, and energy systems. Plus, visit laboratories and get a look at the wide range of opportunities in mechanical engineering.

Mechanical Engineering—Engineering the Human Body
Capacity: 20
52340 • Grades 9–11 • July 17–23, 2016
Cost: Resident $945/Commuter $525

Learn to look at the body from a mechanical engineering perspective. Characterize the mechanical properties of the human body and its tissues. Topics include design for safety, biomimetic design, and the human-technology interface.

Mining Engineering and Operations
Capacity: 20
51868 • Grades 9–11 • July 24–30, 2016
Cost: Resident $895/Commuter $475

Get an inside look at the field of mining engineering. You’ll look at autonomous underground mine truck operations, plus the technologies that model mines and their inner workings. This program provides hands-on mine system simulation and animation modeling experience. You will learn about a lab-scale autonomous mine truck, explore the applications of autonomous equipment in mining engineering, and visit mine sites around the Keweenaw!

Mobile Robotics
Capacity: 20 (grades 9–11)
Capacity: 15 (grades 6–8)
51500 • Grades 9–11 • July 17–23, 2016
51867 • Grades 6–8 • July 24–30, 2016
Cost: Resident $920/Commuter $500

Jump headfirst into the world of autonomous mobile robotics. From concept to construction to computation, this exploration involves building and programming your own robot. Students will solder, build, and program their way through several mini-competitions.

Women in Robotics: Introduction to Manipulators and Underwater Monitoring
Capacity: 30
52338 • Grades 6–8 • July 17–23, 2016
Cost: Resident $895/Commuter $475

This program is a discovery of the field of robotics from two new perspectives. By working with two of Michigan Tech’s robots (GUPPIE and Neu-pulator), students learn how robots can help explore the environment and augment human capabilities.

Note: This is a regular Summer Youth Programs course, however, students from the Keweenaw Peninsula are eligible for a partial scholarship. Visit www.syp.mtu.edu or email syp@mtu.edu for scholarship information.
Aquatic Ecology
51470 • Grades 6–8 • July 17–23, 2016
Cost: Resident $895/Commuter $475
Capacity: 15

Learn about freshwater ecology in Upper Michigan’s beautiful Keweenaw Peninsula. Who’s eating who in the Great Lakes and what makes a species invasive? What exactly is lurking in your typical backyard stream? And why are some lakes clear, while others are green and murky? Learn all about lakes and streams—starting with different types of plant life and working up the food chain to invertebrates and fish. You’ll build your own model ecosystems and explore the great outdoors and Michigan Tech’s science labs. You’ll even investigate your own research questions. Be prepared for variable weather, lots of hands-on experience, and beautiful scenery.

What to bring: Rain gear, rubber boots or waders and hiking boots (if you have them), insect repellent, sunscreen, a water bottle, a swimsuit and towel, clothes that can get dirty, shoes that can get wet and muddy, warm clothes, a camera, a backpack, and a baseball hat/sunglasses. Please, no sandals for wading. If you need outdoor gear, you’ll have the opportunity to rent it from Michigan Tech’s Outdoor Adventure Program (www.oap.mtu.edu) at half off.

Aquatic Ecology: Field Study at Gratiot Lake
51471 • Grades 9–11 • July 24–30, 2016
Cost: Resident $895
Capacity: 8

Spend a week living in a rustic log cabin at Gratiot Lake, in the heart of the Keweenaw Peninsula. Live the life of an ecologist as you collect and analyze aquatic invertebrates, compare water chemistry data, and learn how much fun ecology can be. You’ll learn tracking and casting techniques, explore the ecology of Lake Superior, and discover how to identify invertebrates.

Note: Live-in only. Be prepared to work outdoors in all kinds of weather (and have tons of fun!). Visit the Gratiot Lake Conservancy at www.gratiotlakeconservancy.org for information about where you’ll spend your week. If you are a student from the Keweenaw Peninsula, you may be eligible to apply for the Sandretto Scholarship. See our website for details.

What to bring: A sleeping bag, clothes and shoes that can get wet and muddy, a swimsuit, rain gear, comfortable boots, a water bottle, old tennis shoes or aqua socks, shorts, long pants, a long-sleeved shirt, a warm jacket or sweater, wool socks, a hat, a day pack, insect repellent, and sunscreen. Items encouraged but not required: Chest waders and a camera. A complete packing list will be sent to you with your Welcome Packet. If you need outdoor gear, you’ll have the opportunity to rent it from Michigan Tech’s Outdoor Adventure Program (www.oap.mtu.edu) at half off.

Aviation and Aerospace
51458 • Grades 9–11 • July 10–16, 2016
Cost: Resident $1,000/Commuter $580
Capacity: 20

Explore general aviation with an emphasis on what is required to become a licensed private pilot. You’ll learn about the aerodynamics of flight, how to read aeronautical charts, and how to plot a course, which will be “flown” using a computer-based flight simulator. You’ll also have the chance to ride in a general aviation airplane. Instructors are a mix of certified flight instructors, retired airline pilots, and former military pilots. Explore a variety of career possibilities, including general aviation pilot, military pilot, commercial pilot, FAA radar controller, and unmanned aerial vehicle pilot.

Note: One part of this exploration will be an EAA Young Eagles flight in a general aviation aircraft. Participants are required to provide a signed parent/guardian consent form before arriving at Michigan Tech.
Forensic Science and CSI  
Capacity: 20

51460 • Grades 9–11 • July 10–16, 2016  
51461 • Grades 6–8 • July 17–23, 2016  
51462 • Grades 9–11 • July 24–30, 2016
Cost: Resident $895/Commuter $475

How can you track down a criminal by just one fiber? Learn how forensic scientists solve crimes through DNA analysis, blood-typing and splatter analysis, hair and fiber analysis, and facial reconstruction. Examine bones and tooth impressions, and perform an autopsy through a class dissection. Students will also work in a team to investigate and solve a mock crime scene.

Note: Students should wear long pants and closed-toe shoes.

Genetic Modification and Biotechnology  
Capacity: 20

51464 • Grades 9–11 • July 17–23, 2016
Cost: Resident $895/Commuter $475

Techniques such as genetic transformations are used to improve the production of a product in both number and quality. Learn how to genetically modify bacteria using a heat shock transformation procedure, insert foreign DNA (a pGLO plasmid isolated from jellyfish) into Escherichia coli to make the bacteria glow in the dark, and explore the ethics of genetic engineering (designer babies, genetically modified plants and feedstocks, cloning, and antibiotic production).

Note: Students should wear long pants and closed-toe shoes.

Prerequisite: One year of high school biology is recommended.

Introduction to Microbiology  
Capacity: 15

51951 • Grades 6–8 • June 17–23, 2016
Cost: Resident $910/Commuter $490

Explore a world unseen by the naked eye! You’ll learn microbiology basics, like how to use a microscope, stain specimens, streak pure cultures, and perform cell-density and viability counts. You’ll also be introduced to different classifications of microorganisms and their characteristics. Plus, you’ll get a chance to explore different career paths including laboratory technology in medical and industrial fields.

Medical Laboratory Science  
Capacity: 20

51459 • Grades 9–11 • July 10–16, 2016
Cost: Resident $895/Commuter $475

Medical laboratory scientists use their background in biology and chemistry to develop test procedures that improve healthcare. Perform your own lab exercises in clinical chemistry, immunology, parasitology, microbiology, hematology, blood banking, and urinalysis. Activities include testing blood glucose and cholesterol (clinical chemistry); testing for infectious mononucleosis or strep throat (immunology); looking for malaria, pinworms, or giardia (parasitology); growing and identifying possible disease-causing bacteria (microbiology); looking at blood cells (hematology); urinalysis; and blood typing (blood banking). Safety protocols are closely followed.

Prerequisite: One year of high school biology is recommended.

Medical Physiology  
Capacity: 20

51465 • Grades 9–11 • July 10–16, 2016  
51776 • Grades 6–8 • July 24–30, 2016
Cost: Resident $895/Commuter $475

Discover how a healthy body functions and explore the structure and physiology of muscles, lungs, blood, and the heart and nervous system. Record and interpret an electrocardiogram, perform vision tests, and measure your reflex time under various conditions.

Note: Students should be prepared to perform or observe dissections. Wear long pants and closed-toe shoes.
**Science & Technology Programs**

**Rocketry and Space Science**
51952 • Grades 6–8 • July 10–16, 2016  
51953 • Grades 9–11 • July 24–30, 2016  
**Cost:** Resident $935/Commuter $515  

Get involved in the excitement of rocketry! Learn about aerodynamics and propulsion while you design and build your own rocket. Refine your plan, use software to improve your design, and launch your rocket up to 1,500 feet. You’ll learn about physics, engineering, and career opportunities in science—all while exploring rocketry.

**Wild World of Chemistry**
51466 • Grades 6–8 • July 10–16, 2016  
51467 • Grades 9–11 • July 17–23, 2016  
**Cost:** Resident $895/Commuter $475  

Get ready for hands-on chemistry! Prepare slime and other cool polymer materials to discover the weird-and-wild properties that set them apart. You’ll synthesize aspirin in the same labs used by Michigan Tech students, visit the A. E. Seaman Mineral Museum to learn more about minerals and ores, and explore a historical site to sample stamp sand. You’ll even extract copper! Get ready to discover the amazing properties of DNA by isolating some of your own. Explore light emission and absorption, and other unique characteristics that affect the structure and behavior of matter. Demonstrations, experiments, videos, computer simulations, and tours of the chemistry research facilities will be used to clarify concepts and show how scientists think and work.

*Note:* Students should wear long pants and closed-toe shoes. Midriff tops and open shoes (sandals, flip-flops, and flats) are never allowed in the lab.

*What to bring:* A calculator and a lab coat or oversized T-shirt. You must bring a long-sleeved shirt, long pants, and closed-toe shoes. Optionally, you can also bring your own goggles.

**Wolf and Wildlife Ecology**
51474 • Grades 6–8 • July 24–30, 2016  
**Cost:** Resident $895/Commuter $475  

Study native fauna biology, behavior, and ecological relationships—in the classroom and while exploring the Keweenaw. You’ll learn about animal anatomy, population ecology, and exotic, invasive, and endangered species. Practice Leave No Trace principles as you hike to discover how to monitor and record observations. Get to know bat ecology, take surveys of birds, and learn how to think like a wolf during this exploration.

*Prerequisites:* Good physical condition.

*What to bring:* Sturdy hiking boots, rain gear, insect repellent, sunscreen, and a day pack.
COMPUTING PROGRAMS

3-D Models and Virtual Reality
51700 • Grades 9–11 • July 24–30, 2016
Cost: Resident $895/Commuter $475
Capacity: 20

3-D computer games and animated movies simulate virtual worlds using 3-D models. You’ll create your own 3-D model using Google SketchUp and view your creation in a head-mounted display system in Michigan Tech’s Virtual Reality Lab. You’ll also learn about virtual-reality technologies, 3-D photographs, and basic computer programming.

App and Web Development: Designing for Humans
51814 • Grades 9–11 • July 17–23, 2016
Cost: Resident $895/Commuter $475
Capacity: 20

People interact with software every day through mobile devices and websites. How do we make software humans want to use? In this program, you’ll develop mobile apps and websites using human-centered design principles. Concepts from computer science, psychology, and communications are combined to understand the features and qualities of usable product design. Test and evaluate existing apps and websites to learn how to recognize good elements of interface design including spatial ordering, color scheme, navigation, and interaction.

Introductory Video Game Programming
51469 • Grades 6–8 • July 10–16, 2016
Cost: Resident $895/Commuter $475
Capacity: 20

Intro to Video Game Programming offers a first look at programming for budding game developers. Through guided work sessions, lectures, and plenty of time to create, you’ll cover the fundamentals of game design. Complete a series of mini-games to understand concepts like collision, animation, basic AI techniques, and state-machines. Introductory material will make use of the Processing (www.processing.org) environment and work up to coding with the Java programming language. You’ll leave with game coding experience and the knowledge to continue programming on your own. (No previous computer programming experience is required.)

Stop the Hackers!
51468 • Grades 9–11 • July 17–23, 2016
Cost: Resident $895/Commuter $475
Capacity: 15

How do computer hackers infiltrate a system and steal private information? Want to learn how to keep your system safe? Come and explore the world of computer security. Discover the kinds of attacks hackers launch, including key loggers, viruses, Trojan horses, and phishing scams. Explore cryptography, access control, virus detection, and other ways to keep information safe.

Video Game Programming
52080 • Grades 9–11 • July 24–30, 2016
Cost: Resident $895/Commuter $475
Capacity: 20

Video Game Programming offers a crash-course in programming for budding game developers. Through guided work sessions, lectures, and plenty of time to create, you’ll cover the fundamentals of game design. Complete a series of increasingly complex mini-games to understand concepts like collision, animation, basic AI techniques, and state-machines. Introductory material will make use of the Processing (www.processing.org) environment and work up to coding with the Java programming language. You’ll leave with game coding experience and the knowledge to continue programming on your own.
**Island Explorations on Isle Royale**  
**51865 • Grades 9–11 • July 10–16, 2016**  
**Cost: Resident $895**

Head to Isle Royale National Park for a hiking and camping adventure on one of the least-visited national parks! Before leaving the mainland, we'll cover the seven basic principles of Leave No Trace, what to expect while on the island, review health and dietary needs, and pack for the trip. Tents, cooking equipment, stoves, water filters, and other group gear will be distributed Sunday evening. On the island, we'll explore the northeast end around Rock Harbor, Three Mile, and Daisy Farm. Plus, we'll hike to the top of Mt. Ojibway, swim in Lake Superior (brrr!), and enjoy star-gazing. Hopefully we'll even spot a moose!

**Note:** Live-in only. This exploration returns to campus after the charter bus has departed. Please make overnight accommodations and travel arrangements accordingly.

**Prerequisites:** Students should have the ability to carry a backpack (loaded with 30–50 pounds of equipment, food, and supplies) for 3–5 miles per day. Previous hiking, backpacking, and wilderness experience is helpful, but not required.

**What to bring:** Comfortable, broken-in hiking boots or sturdy athletic shoes and personal gear, which will be outlined in a packing list given to you after enrollment. Gear is available from Outdoor Adventure Program (OAP) for half off (backpacks, sleeping bags, sleeping pads, mess kits, etc.), and must be arranged in advance. OAP will provide all group gear (tent, pots, pans, stoves, water filters, etc.) necessary for the trip. Do not purchase new boots days before this trip, they need to be broken in for two months or more. A good pair of athletic shoes will also work.

**Outdoor Adventure 101**  
**52332 • Grades 6–8 • July 17–23, 2016**  
**Cost: Resident $895**

Outdoor Adventure 101 is your chance to try a lot of new outdoor activities, like a high and low ropes course, zip lining, paddling, hiking, and camping. Spend the first three days learning skills to prepare for an overnight camping trip on Thursday. You’ll learn backcountry camping skills, including water filtration, cooking over a campfire, reading a map, gear care, and basic trip planning tools.

**Note:** A one-night overnight camping trip on Thursday night is planned as a part of the week’s activities. Accommodations can be made, but all are encouraged to attend.

**What to bring:** Outdoor Adventure Program (OAP) will provide all the group gear (tent, pots, pans, stoves, water filters, etc.) necessary for the trip. Participants will need to provide personal gear, which will be outlined in a packing list given to you after enrollment. Equipment can be rented from OAP at half off (backpacks, sleeping bags, sleeping pads, mess kits, etc.), and must be done in advance.

**Outdoor Skills and Leadership**  
**51959 • Grades 9–11 • July 24–30, 2016**  
**Cost: Resident $895**

Have a blast in an exciting outdoors-based leadership program while you develop communication, problem-solving, decision-making, and teamwork skills, as well as self-esteem and trust. Prepare to climb, swing, balance, jump, and devise solutions to a variety of situations. You’ll experience a raised challenge course, a zip line, and low course activities. Utilize the skills you learned earlier in the week with a student-planned and -led two-night overnight hiking and camping adventure.

**Note:** A two-night overnight camping trip on Wednesday and Thursday night is planned as a part of the week’s activities. Participants are required to go on the overnights.

**What to bring:** Outdoor Adventure Program (OAP) will provide all the group gear (tent, pots, pans, stoves, water filters, etc.) necessary for the trip. Participants will need to provide personal gear, which will be outlined in a packing list given to you after enrollment. Equipment can be rented from OAP at half off (backpacks, sleeping bags, sleeping pads, mess kits, etc.), and must be done in advance.
BUSINESS, HUMANITIES, & SOCIAL SCIENCES PROGRAMS

Be Your Own Boss
51502 • Grades 9–11 • July 17–23, 2016
Cost: Resident $895/Commuter $475
Learn what it takes to start your own business! This course will take you through the steps of how to be a successful entrepreneur. You’ll learn how to develop a solid business plan and how to market to a target audience. Each day of the week will be dedicated to different activities that will teach you business skills, including marketing, finance, management, and sales. You will also explore advertising avenues and study various marketing approaches, such as television, radio, newspaper, and social media platforms like Facebook and Twitter. On Thursday, you’ll get to sell your products at a variety show!

Blacksmithing
51475 • Grades 9–11 • July 24–30, 2016
Cost: Resident $945/Commuter $525
Explore the art of blacksmithing. Learn how to draw out your metal, punch holes, upset the end of a bar, and split steel with a chisel. You’ll also have the opportunity to bend, rivet, and twist bars, as well as make scrolls and tendons. Build your own forge and anvil to begin smithing on your own.

What to bring: Old jeans, long-sleeved shirt, and leather shoes (no open-toe shoes). Do not wear flammable materials.

Computer Graphics and Design
51702 • Grades 9–11 • July 17–23, 2016
Cost: Resident $895/Commuter $475
Translate your creative and visual design ideas into computer art. Learn some of the most adaptable design principles and how to apply them to your own text, illustrations, and photographic compositions. Create your own calendar or graphic tee to add to your portfolio.

Digital Photography
51476 • Grades 6–8 • July 10–16 2016
51872 • Grades 9–11 • July 17–23, 2016
Cost: Resident $895/Commuter $475
Digital photography combines art, technology, and the great outdoors! Capture images on explorations throughout the Keweenaw Peninsula to beautiful shorelines, waterfalls, and abandoned mine structures. Learn about exposure, composition, and visualization. Explore creative possibilities as you refine your images with software like Adobe Photoshop.

What to bring: A DSLR is strongly recommended. Hybrid and more basic cameras are also appropriate as long as settings like exposure, aperture, and shutter speed can be adjusted. You should also bring a memory card, card reader, flash drive or external hard drive, and a battery charger. If you have them, bring an extra battery, your camera manual, a camera case, a tripod, and any lenses or accessories. Since you will be spending many hours outdoors, bring comfortable walking or hiking boots, insect repellent, and a water bottle.

Psychology in the Real World
51957 • Grades 9–11 • July 10–16, 2016
Cost: Resident $895/Commuter $475
Find out how psychology impacts everyday life. You’ll explore basic psychology issues in learning, sensation and perception, decision-making, and research in the behavioral sciences. Experience hands-on demonstrations, like behavior modification, visual illusions, and social experiments, that highlight psychology principles.
## Planning Calendar

<table>
<thead>
<tr>
<th>SUNDAY</th>
<th>MONDAY</th>
<th>TUESDAY</th>
<th>WEDNESDAY</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>June 19</strong></td>
<td><strong>June 20</strong></td>
<td><strong>June 21</strong></td>
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<tr>
<td>8:00 AM Charter bus arrives at Michigan Tech</td>
<td>5:30 PM Picnic at McLain State Park</td>
<td>4:00 PM Tech Expo</td>
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<tr>
<td>10:00 AM-2:00 PM Registration</td>
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<tr>
<td>1:00 PM and 2:00 PM Optional campus tours</td>
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<tr>
<td>3:00 PM Orientation</td>
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<tr>
<td>4:00 PM Challenge course</td>
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### SYP Closed

- **July 3**: 4th of July holiday
- **July 10**: 4th of July holiday
- **July 17**: 4th of July holiday
- **July 24**: 4th of July holiday

### Notes

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<table>
<thead>
<tr>
<th>SUNDAY</th>
<th>THURSDAY</th>
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</thead>
<tbody>
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<td><strong>June 24</strong></td>
<td><strong>June 25</strong></td>
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<tr>
<td>7:00 pm Variety show</td>
<td>3:30 pm Program wrap-up 5:00 pm Checkout begins 6:00 pm Block party 10:00 pm Charter bus departs</td>
<td>9:00 am–12:00 pm Checkout Night—Charter bus pick-ups for ESP and WICS</td>
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<td>SYP Closed 4th of July holiday</td>
<td>SYP Closed 4th of July holiday</td>
<td>Night—Charter bus pick-ups for SYP 1</td>
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</table>

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<thead>
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<td>9:00 am–12:00 pm Checkout Night—Charter bus pick-ups for SYP 2</td>
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<td>9:00 am–12:00 pm Checkout</td>
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Use this calendar for your planning needs. Carefully review information for the week(s) you’ll be attending SYP—each week has its own unique flair!

*Note: All events and times listed are subject to change.*
2016 HOCKEY CAMPS

July 10-14, July 17-21, July 24-28, July 31-August 4

(3) Age Groups Offered Each Week
Birth Years 2007-09, Birth Years 2004-2006, Birth Years 2001-2003

#FutureHuskies f www.michigantechrecreation.com twitter #FollowtheHuskies
SUMMER YOUTH PROGRAMS 2016 CALENDAR

Can’t decide which program to choose? Attend more than one!
SYP summer camps and explorations are so much fun, it’s common for students to stay for two or three weeks—some even spend the whole summer here! To help you decide when to attend, we’ve created an at-a-glance calendar listing of all programs. Weekend stay-overs between programs are available for a fee—meals, lodging, and trips throughout the local area are provided. Start planning now, and get ready to have an epic summer!

<table>
<thead>
<tr>
<th>EXPLORATION NAME</th>
<th>GRADE</th>
<th>CRN</th>
<th>PAGE NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>June 19–25, 2016</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ENGINEERING</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women in Engineering (WIE)</td>
<td>9–11</td>
<td>51478</td>
<td>Page 7</td>
</tr>
<tr>
<td><strong>June 26–July 2, 2016</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ENGINEERING</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engineering Scholars Program (ESP)</td>
<td>9–11</td>
<td>51773</td>
<td>Page 6</td>
</tr>
<tr>
<td><strong>COMPUTING</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women in Computer Science (WICS)</td>
<td>9–11</td>
<td>51869</td>
<td>Page 7</td>
</tr>
<tr>
<td><strong>July 10–16, 2016</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ENGINEERING</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemical Engineering</td>
<td>9–11</td>
<td>51450</td>
<td>Page 8</td>
</tr>
<tr>
<td>Civil Engineering</td>
<td>9–11</td>
<td>52330</td>
<td>Page 8</td>
</tr>
<tr>
<td>Computer and Electrical Engineering</td>
<td>9–11</td>
<td>51451</td>
<td>Page 8</td>
</tr>
<tr>
<td>Engineering 101</td>
<td>6–8</td>
<td>51452</td>
<td>Page 8</td>
</tr>
<tr>
<td>Geological Engineering</td>
<td>9–11</td>
<td>52329</td>
<td>Page 8</td>
</tr>
<tr>
<td>Introduction to Robotics: Manipulators and Underwater Monitoring</td>
<td>6–8</td>
<td>52194</td>
<td>Page 9</td>
</tr>
<tr>
<td>Materials Science and Engineering</td>
<td>6–8</td>
<td>51456</td>
<td>Page 9</td>
</tr>
<tr>
<td>Mechanical Engineering: Automotive Engineering</td>
<td>9–11</td>
<td>51457</td>
<td>Page 9</td>
</tr>
<tr>
<td>National Summer Transportation Institute (NSTI) *</td>
<td>9–11</td>
<td>51490</td>
<td>Page 6</td>
</tr>
<tr>
<td><strong>SCIENCE AND TECHNOLOGY</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aviation and Aerospace</td>
<td>9–11</td>
<td>51458</td>
<td>Page 10</td>
</tr>
<tr>
<td>Forensic Science and CSI</td>
<td>9–11</td>
<td>51460</td>
<td>Page 11</td>
</tr>
<tr>
<td>Medical Laboratory Science</td>
<td>9–11</td>
<td>51459</td>
<td>Page 11</td>
</tr>
<tr>
<td>Medical Physiology</td>
<td>9–11</td>
<td>51465</td>
<td>Page 11</td>
</tr>
<tr>
<td>Rocketry and Space Science</td>
<td>6–8</td>
<td>51952</td>
<td>Page 12</td>
</tr>
<tr>
<td>Wild World of Chemistry</td>
<td>6–8</td>
<td>51466</td>
<td>Page 12</td>
</tr>
</tbody>
</table>

*NSTI is a two-week course—July 10–23, 2016

continued on page 20
<table>
<thead>
<tr>
<th>EXPLORATION NAME</th>
<th>GRADE</th>
<th>CRN</th>
<th>PAGE NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>July 10–16, 2016 (continued)</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>Computing</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Introductory Video Game Programming</td>
<td>6–8</td>
<td>51469</td>
<td>Page 13</td>
</tr>
<tr>
<td><strong>Outdoor Adventures</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Island Explorations on Isle Royale</td>
<td>9–11</td>
<td>51865</td>
<td>Page 14</td>
</tr>
<tr>
<td><strong>Business, Humanities, and Social Sciences</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Digital Photography</td>
<td>6–8</td>
<td>51476</td>
<td>Page 15</td>
</tr>
<tr>
<td>Psychology in the Real World</td>
<td>9–11</td>
<td>51957</td>
<td>Page 15</td>
</tr>
<tr>
<td><strong>July 17–23, 2016</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Engineering</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civil Engineering</td>
<td>6–8</td>
<td>51962</td>
<td>Page 8</td>
</tr>
<tr>
<td>Engineering 101</td>
<td>9–11</td>
<td>51453</td>
<td>Page 8</td>
</tr>
<tr>
<td>Geological Engineering</td>
<td>6–8</td>
<td>51774</td>
<td>page 8</td>
</tr>
<tr>
<td>Mechanical Engineering—Engineering the Human Body</td>
<td>9–11</td>
<td>52340</td>
<td>Page 9</td>
</tr>
<tr>
<td>Mobile Robotics</td>
<td>9–11</td>
<td>51500</td>
<td>Page 9</td>
</tr>
<tr>
<td>National Summer Transportation Institute (NSTI)*</td>
<td>9–11</td>
<td>51490</td>
<td>Page 6</td>
</tr>
<tr>
<td>Rail and Intermodal Transportation (RIT)</td>
<td>9–11</td>
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<td><strong>Science and Technology</strong></td>
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<tr>
<td>Forensic Science and CSI</td>
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<td>Genetic Modification and Biotechnology</td>
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<td>Stop the Hackers!</td>
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<td>Be Your Own Boss</td>
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<td>Computer Graphics and Design</td>
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<td>Digital Photography</td>
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*NSTI is a two-week course—July 10–23, 2016

continued on page 21
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<th>Exploration Name</th>
<th>Grade</th>
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<td><strong>Engineering</strong></td>
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<td>Aquatic Ecology: Field Study at Gratiot Lake</td>
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<td>51471</td>
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<td>51953</td>
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<td><strong>Computing</strong></td>
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<td><strong>Business, Humanities, and Social Sciences</strong></td>
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<tr>
<td>Blacksmithing</td>
<td>9–11</td>
<td>51475</td>
<td>Page 15</td>
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</tbody>
</table>
# Summer Youth Programs Payment Form

**Applicant's name ____________________________________________ Date of Birth __________________**

**All applicants must complete and return this page. Exploration fees do not apply to Competitive Scholarship Programs. Payments are due in full by June 1, 2016.**

## Participant Fees

**Fee per Exploration:**
- July 10–30: live-in $895*, commuter $475  
  *Some exploration fees vary—see exploration description for details.
- Early arrival/late departure: $75 per day (number of days__________)  
- Stay-over fee: $125 per weekend (number of weekends__________)  
- Charter bus: $275 round-trip; $175 one-way  
  *(Due in full within 10 days of purchase; cost includes a nonrefundable $25 processing fee.)*

**Subtotal ___________________**

## Discounts/Awards

- Michigan Tech alumni and staff award: $50  
  *Children and grandchildren of Michigan Tech alumni and staff are eligible once per summer.*

**Name ____________________________ Relation to child ___________________**

- Staff  
- Alumni: Graduation year ____________________________

- Multiple-week discount—$50 off additional weeks  
  *Applicable to each additional exploration after the first week*

**Payment Enclosed**

*A minimum nonrefundable registration and processing fee of $100 per exploration is due before your application will be processed.*

**Final Balance Due $ ___________________**

**Payments are due in full by June 1, 2016.**

## Method of Payment

- To pay by check or money order, please include the student's name on the memo line, and make your check or money order payable to “Michigan Tech—SYP.”

- To pay by credit card, make your payment online through our secure system, complete the information below, or call our toll-free number to give your card information over the phone. Your credit card will NOT be billed until the student's enrollment is processed.

**Cardholder's name _______________________________________ Email address _______________________________________**

**Address __________________________________________________________________________________________**

**City, State, ZIP________________________________________________________**

**Day telephone __________________________________________________________**

- Discover  
- Visa  
- Mastercard  
- 3-digit security code ___________

**Card number ___________________________________________________________**

**Expiration date _________________________________________________________**

**Authorized signature_____________________________________________________________ Date_____________________**

### You may mail your payment to:

Michigan Tech Summer Youth Programs  
Administration Building 217  
1400 Townsend Drive  
Houghton, MI 49931-1295  
Telephone 906-487-2219  
Toll-free 888-773-2655  
Fax 906-487-1136

### For office use only:

- Credit card processed  
- Check received  
- #________________________ Name________________________

- Money order/cashier's check  
- #________________________ Name________________________ Bank________________________

- M# __________________________________________________________________________

- Notes__________________________________________________________________________
Summer Youth Programs Application

**All applicants must complete and return this form.**

Explorations fill quickly! There are two ways to apply:
Online at www.syp.mtu.edu  •  By mail (see below)

Please complete both sides of this application and send it with a $100 nonrefundable registration and processing fee for each exploration. **Applications without applicable deposit will not be processed.** Fill out the attached payment form and pay by credit card, check, or money order payable to “Michigan Tech—SYP.” Do not send cash, and do not staple your payment to this form.

**Legal name** _______________________________________________________________________________________________________________________________

**Preferred name/nickname** _______________________________________________________________________________________________
This is how your name will appear on your participant ID.

**Contact Information**

**Participant's email** _________________________________________________________________________________________________________

**Address/PO Box**__________________________________________________________ **City**______________________________________________

**State/Province**__________________________________________________ **ZIP or Postal code**__________________________________________

**County**_________________________________________________________ **Country**___________________________________________________

**Phone number**______________________________________________ **Participant’s cell phone**________________________________________

**Personal Information**

**Gender**_________________________________________________________ **Birth date**_________________________________________________

**Current age**____________________________________________________

**School Information**

What is the name of the school you attended this year?_____________________________________________________________________

What grade will you have completed by June 2016?__________________________________________________________________________

Current class rank: ___________out of ___________  Cumulative GPA:_______________(4.0 scale)

**Parent/Guardian Information—Each parent/guardian must fill out the following information:**

<table>
<thead>
<tr>
<th>Parent first name</th>
<th>Middle name</th>
<th>Last name</th>
<th>Suffix</th>
<th>Parent first name</th>
<th>Middle name</th>
<th>Last name</th>
<th>Suffix</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationship to applicant</td>
<td>Evening phone number</td>
<td>Day phone number</td>
<td>Cell phone number</td>
<td>Email address</td>
<td>Is your address the same as the participant’s?  □ No  □ Yes</td>
<td>If no, provide address</td>
<td></td>
</tr>
</tbody>
</table>
How did you hear about our program?

☐ Counselor or teacher  ☐ Previous participant  ☐ Summer Youth Programs website  ☐ Poster  ☐ Friend  ☐ Catalog
☐ Internet search  ☐ Michigan Tech alumni or faculty/staff  ☐ Mind Trekkers event: Date and place__________________________
☐ Social Media  ☐ Other ____________________________

Enrollment
I am enrolling in the following exploration(s):

<table>
<thead>
<tr>
<th>Exploration number</th>
<th>Exploration name</th>
<th>Dates</th>
<th>Live-in</th>
<th>Commuter</th>
<th>Participant fee</th>
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</thead>
<tbody>
<tr>
<td>Example: 51450</td>
<td>Chemical Engineering</td>
<td>July 10–16</td>
<td>☑</td>
<td>☐</td>
<td>$920</td>
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</tbody>
</table>

Please list alternate exploration choices in order of preference.

<table>
<thead>
<tr>
<th>Exploration number</th>
<th>Exploration name</th>
<th>Dates</th>
<th>Live-in</th>
<th>Commuter</th>
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</tbody>
</table>

Transportation

More information, including specific charter bus drop-off and pick-up locations, will be sent to you in your Confirmation Packet. Please refer to our website for more details on your transportation options.

When do you plan on arriving at Michigan Tech?
Check-in: Sunday 10:00 AM–2:00 PM EDT
Day ___________ Time ________________

How do you plan on arriving at Michigan Tech?

☐ Car
☐ United Airlines: Houghton (CMX)
  Flight number ___________ Arrival time ________________

☐ SYP charter bus
  Please pick me up in:  ☐ Lansing  ☐ Detroit  ☐ Milwaukee  ☐ Green Bay  ☐ Iron Mountain
  ☐ Kalamazoo  ☐ Chicago
  *(July 10–23 only)
  Pickup will be the Saturday evening prior to the program start date.

☐ Other ____________________________

When do you plan on departing from Michigan Tech?
Checkout: Friday 5:00–11:00 PM and Saturday 9:00 AM–NOON EDT
Day ___________ Time ________________

How do you plan on departing from Michigan Tech?

☐ Car
☐ United Airlines: Houghton (CMX)
  Flight number ___________ Departure time ________________

☐ SYP charter bus
  Please drop me off in:  ☐ Lansing  ☐ Detroit  ☐ Milwaukee  ☐ Green Bay  ☐ Iron Mountain
  ☐ Kalamazoo  ☐ Chicago
  *(July 10–23 only)
  Departure from Michigan Tech will be the Friday evening following the program.

☐ Other ____________________________

Please note: If you will be arriving before the program begins or departing after its conclusion, there is an additional fee. See website for details (www.syp.mtu.edu). No late departures or stay-overs July 2 or July 30.
Don’t be ordinary. #BeAwesome.