

What's it all about?

For Students:

It's about being part of an academic "team" that has access to mentors and subject matter experts. It's about gaining hands-on, industry-based experience.

For Parents:

It's about providing your student with a strong education in math, science, English, technology, and communication. It's about a tuition free program that provides real-life practical experience within a manufacturing venue. The class of 2011 will be MTA's 15th graduating class, joining others who have launched themselves successfully in their careers.

For Counselors and Teachers:

It's about a TBAISD program that does not take away any of your school's student funding. Your students can earn high school academic credits through an integrated engineering and manufacturing curriculum that could lead to postsecondary education/training or immediate employment.

For Employers:

It's about helping develop a work force able to compete in the global economy. Your support through job shadowing, mentoring, and other opportunities help build a strong relationship with the community and its people.

If you have any questions about MTA please contact us!

Tim Wheatley
231-995-1304

twheatley@nmc.edu

This newsletter is provided by the MTA Guidance Board

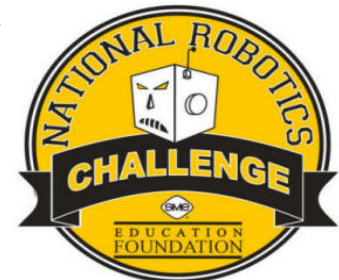
Class of 2010

- **Josh Barron (TC Central HS)** - Northern Michigan University, National Guard ROTC
- **Keenan Brons-Piche (TC College Prep. Academy)** - Copenhagen Business School + NMC
- **Jacob Clark (Homeschool)** - LSSU, Computer and Elec. Eng.
- **David Couturier (Lake Leelanau St. Mary)** - LSSU, Engineering
- **Zellie A. Dow Jr. (Bellaire HS)** - Military (tent.)
- **Jeff Dreves (Buckley)** - MSU, Agricultural Business Management
- **Colter Fatt (Glen Lake HS)** - Colorado College
- **Ariena Grody (Mancelona HS)** - Davenport University, Bio-metric Security, Computer Networking
- **Karl Haworth (TC Central HS)** - Albion College, Pre-med
- **Julian Hills (Benzie Central HS)** - U of M, College of Engineering
- **Joe Jewell (Alba HS)** - Michigan Tech, Biomedical Engineering
- **Austin Johnson (Suttons Bay HS)** - MSU, Air Force ROTC
- **Jack Kerby-Miller (Glen Lake HS)** - Middlebury College, Pre-med
- **Angus MacLellan (St. Francis HS)** - University of Waterloo, Civil Engineering
- **Ryan Moore (Central Lake HS)** - Coast Guard Academy Class of 2014, Mechanical Engineering
- **Hayley Piine (Suttons Bay)** - U of M, Engineering
- **Emily Raetz (TC Christian)** - Hope College, Chemistry
- **Jacob Soenen (Kalkaska HS)** - NMC+ 4-yr. University, Engineering
- **Jonathon Wheatley (St. Francis HS)** - St. Thomas Aquinas, Biology

MTA Team Takes Gold In Robot Construction

National Robotics Challenge (NRC) in Marion, Ohio *Student Designed, Student Built*

On April 16 and 17, students from the Manufacturing Technology Academy of Northwest Michigan (MTA) traveled to Marion, Ohio to compete in the 25th annual National Robotics Challenge (NRC), America's longest-running robotics competition. MTA students competed in four different contests: Robot Construction, Heavyweight Sumo Robot, Lightweight Sumo Robot and Maze Robot.



The MTA Robot Construction team brought home a first place "Gold Award" for their "Off Road Motorized Skateboard" project. The team consisted of seniors **Jonathon Wheatley (St. Francis)**, **Julian Hills (Benzie Central)**, **David Couturier (Lake Leelanau St. Mary's)**, and **Jacob Soenen (Kalkaska)**, who also designed the project. The team modeled the

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Manufacturing Technology Academy
 TBAISD Career-Tech Center
 880 Parsons Rd.
 Traverse City, MI 49686

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MTA Mission Statement: To provide a learning environment which motivates and enables students to acquire world-class manufacturing and engineering skills while positioning them to compete and excel in the global market.

NRC, cont.

skateboard using SolidWorks 3-D design software, created a budget, and built the project within the time and financial constraints. A technical paper describing the device and a competition interview before a panel of engineers, used as judges, were also requirements.



Jonathon Wheatley (l) and Julian Hills display the skateboard and the Gold Award.

The "Sumobot" is fully automated, using LED sensors to find the opposing robot and then advances on tank treads powered by six CIM motors and attempts to push the opponent off a 16' by 16' mat.

Ryan Moore (Central Lake) and Arlena Grody (Mancelona) comprised the Maze Robot team. They constructed an automated robot with ultrasonic sensors that could find its way through an 8-foot by 8-foot plywood maze. At the competition, this robot completed the maze successfully twice within three attempts.

A second MTA team, consisting of seniors **Jack Kerby-Miller (Glen Lake) and Karl Haworth (Traverse City Central)** placed fourth in the Heavy-weight Sumo Robot (max. 125 lbs.) contest at the competition.

The Lightweight Sumo Robot was reconstructed and driven by **Josh Barron (Traverse City Central)**. It is a 50-pound remote control robot designed to push an opponent's robot off of a 16-foot square mat. The Lightweight won two matches before being eliminated.

Thank You to Our NRC Donors for Their Support

Our 2010 Financial Partners:

Grand Traverse
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Our 2010 Material and Service Donors:

RUSSELL WENTWORTH



Additional Contributions During the School Year: ATA Black Belt Academy, Al and Mary Jordan (GTRCF).
Other Support in the Form of Volunteer Hours (securing donations, building classroom shelves, installing equipment, doing our taxes, arranging for speakers, assisting with the newsletter) :Jody Bennett, Tim Berg, Bob Bierley, Al Jordan, Carl Kucsera, Ken Naeger, Matt Olosky, John Tobin, Bob Soutas-Little, Tool North, Fred Zwemer, Internship Employers