ENTRY DEADLINE IS
FRIDAY, MARCH 24, 2017
For details on each competition and to register, go to: www.nwtc.edu/TechChallenge

FRIDAY, APRIL 7, 2017
8:30 A.M.–2:00 P.M.
Test your skills and compete for college scholarships!

For details on each competition and to register, go to: www.nwtc.edu/TechChallenge
Guidelines

**GENERAL RULES**
- Students in grades 9-12 are eligible to participate.
- Students may choose up to a maximum of THREE (3) DISPLAY COMPETITIONS.
- Students may enter only ONE (1) LIVE COMPETITION per competitive category.

**REGISTER ONLINE**
- Students MUST register in advance to enter Tech Challenge competitions.
- Register online by Friday, March 24, 2017, go to: [www.nwtc.edu/TechChallenge](http://www.nwtc.edu/TechChallenge)

**Set Up and Equipment**

**LIVE COMPETITION**
- Students are to report to the room for their competition as noted on the schedules provided the day of the event.

**DISPLAY COMPETITION**
- Projects are to be delivered or submitted to the appropriate Display location by 9:00 a.m. on April 7.
- Projects may be picked up any time after 11:30 a.m.

**Judging and Awards**

**JUDGING FOR DISPLAY COMPETITION**
Judges are chosen from local industries, advisory committee members, alumni, or staff. Judging will be from 9:00 a.m. to 11:30 a.m. on April 7.

**AWARDS**
The top “STAR FIRST” winners will receive a scholarship to NWTech.

**SCHOLARSHIPS**
Tech Challenge scholarship awards will be provided to all “STAR FIRST” place winners, redeemable upon enrollment as a student ($1000 for 12 or more credits or $500 for 3-11 credits) at Northeast Wisconsin Technical College.

Scholarships may be redeemed at the Green Bay, Marinette, or Sturgeon Bay campuses. Scholarships are redeemable only for the summer or fall semester FOLLOWING high school graduation. Students must be enrolled as a student on campus. These scholarships are non-transferable.

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**LIVE COMPETITIONS**

**SCIENCE**
- **Anatomy & Physiology Knowledge Bowl**
  Your knowledge of anatomy and physiology will be challenged in this two-round, team competition. All teams compete in the first round of oral quizzing which will incorporate open-ended questions (and buzzers, of course!). Through elimination, the top two scoring teams move on to the second round – a written, hands-on laboratory competition involving the identification of anatomical structures and their functions. Sound interesting? Put a team together, study some A & P, and game on!
- **Catapult Catastrophe!**
  Imagine, studying mechanics through the historical lens of the catapult. Awesome, right? To prepare for this team competition, your physics class could learn about topics such as kinematics, forces, momentum, and impulse which would all be integrated into the researching, building, testing, and modification of catapults made mostly of recycled materials. You and your fellow students will compete in your own school/classroom to determine the representative to Tech Challenge.

**TRADES AND ENGINEERING TECHNOLOGIES**
- **Auto Collision Repair**
  Demonstrate your skills in repairing vehicle damage. In this competition, you’re required to repair a damaged part to industry standards. NWTech will supply the damaged part, tools, and materials. You supply the knowledge and skills!
- **Auto Technology**
  Held on Green Bay and Marinette Campuses
  Got what it takes to troubleshoot car problems? Prove it in this three-section event! Section 1: Test typical automotive electrical/electronic components using common electrical testing equipment. Section 2: Identify and evaluate typical automotive mechanical components. Common evaluation tools will be used for this section. Section 3: Take a written exam consisting of questions relating to typical automotive systems operation, diagnosis and service.

**DISPLAY COMPETITIONS**

**TRAVES AND ENGINEERING TECHNOLOGIES**
- **Architectural Drawing**
  Let’s see your best architectural drawings! For this challenge, you’ll submit building drawings you have completed at school.
- **Machine Shop Project**
  In this challenge, you’ll use machine shop equipment to make a metal object of your choice. Your display will be judged on quality, complexity, and overall appearance and utility.
- **Static Welding/Fabrication Projects**
  Put your welding skills to the challenge in this display competition. Fabricate a metal object of your choice in either category of creative art fabrication or a functional fabrication project. Your work will be judged on quality, complexity, overall appearance, workmanship, and utility.
- **Sustainable Solar Building Design**
  Design and model a simple three-room home to maximize its energy efficiency and renewable energy production. Least energy consuming model home wins! Competitors may work in a team of two-to-four students.

**BUSINESS AND INFORMATION TECHNOLOGY**
- **Live Radio Announcement Competition**
  Read a public service announcement (PSA) on NWTech’s Internet Radio Station – TC Campus Connection. You will have five minutes to preview the 30-second radio PSA before announcing it on the air. You will decide the mood and feeling that the announcement should convey. Is it humorous, serious, playful or instructional? You’ll need to complete the reading of the PSA in 30 seconds or be cut off mid-message. How fast or slow do you speak? What do you sound like? The best announcement wins!

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Live Competitions Display Competitions

Science

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Trades and Engineering Technologies

- Auto Collision Repair
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- Auto Technology
  Held on Green Bay and Marinette Campuses
  Got what it takes to troubleshoot car problems? Prove it in this live contest as noted on the schedules provided the day of the event.

Business and Information Technology

- Design and Graphic Technology
  Create and display an 11x17" poster (landscape or portrait) with a theme focused on a public service announcement. The poster can be created using any raster or vector image program(s). Can’t wait to see your creative designs!
- Live Radio Announcement Competition
  Read a public service announcement (PSA) on NWTC’s Internet Radio Station - TC Campus Connection. You will have five minutes to preview the 30-second radio PSA before announcing it on the air. You will decide the mood and feeling that the announcement should convey. Is it humorous, serious, playful or instructional? You’ll need to complete the reading of the PSA in 30 seconds or be cut off mid-message. How fast or slow do you speak? What do you sound like? The best announcement wins!
- Printed Production Piece
  Prove your printing prowess in this display competition. Present a production-style printed piece in either a one- or multi-color scheme. You’ll use one of the five major publishing methods – offset, gravure, flexographic, screen or digital.
- Video Production
  Produce a one-to-two-minute public service announcement (PSA) video. Pick your topic – it could be energy conservation, or anti-cyberbullying, or maybe the educational benefits of video games, to name just a few potential themes. The PSA possibilities are endless, but all video and audio content must be original and copyright free. Go to nwtc.edu/techchallenge for detailed submission instructions.

Trades and Engineering Technologies

- Diesel Technology
  Held on Sturgeon Bay Campus
  Test your knowledge of basic diesel engine theory, parts identification and troubleshooting. The contest will consist of a written test, parts identification and troubleshooting a live, compact Kubota diesel engine plus a bonus trouble shooting question on a state-of-the-art electronic diesel engine! The contest will be held at NWTC’s Diesel Facility on Sturgeon Bay Campus.
- Parametric Modeling Challenge
  Let’s see your parametric modeling software skills. You’ll use AutoDesk Inventor or SolidWorks to draw a machine part in this live contest.
- Revit Proficiency
  Have experience and skills with Revit building information modeling software? In this challenge, you’ll draw a building/portion of a building in Revit.
- Welding Skills Competition
  Show us your welding skills! In this competition, you’ll demonstrate your skills in oxy/acetylene cutting and multiple welding processes. The event will consist of three parts and will take from two to two-and-a-half hours.
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