

READ – H.S. – READ

PA-TSA Region 8 Competitions at Northern Cambria Elementary/Middle School Saturday, February 3, 2018

All NEW and RETURNING Chapters must be officially registered with National TSA by January 15, 2018 to participate in the PA-TSA Region 8 competitions. This is part of the state By-Laws. There will be no exceptions.

There will be **NO** on-site registration. Students may drop contests, but no chapter may add contests or add students to contests. Following national and state registration methods, you must register your chapter for team events; but the individuals participating in the events will be declared at contest sign-in and not on the registration form. Be sure to check your registration form carefully before registering your contestants. The registration deadline is **11:59 pm, Friday, January 19, 2018**.

- **Registration:** is \$8.00 per student. Send the **2018 PA-TSA Region 8 Conference High School Chapter Registration Payment Form** and payment-in-full to:

Park Forest Middle School
2180 School Drive
State College, PA 16803.

Attn: Jeff Seamans

All checks shall be made payable to **PA-TSA Region 8**. Payment-in-full **MUST** accompany the completed **2018 PA-TSA Region 8 Conference High School Chapter Registration Payment Form** and be “In Jeff’s Hands” by Friday, January 19, 2019. *(Yes, send the form, as well. We shall have it as a back-up in case of “Technical Difficulties”.)*

- **Food and Beverages:** will be available for purchase in the school cafeteria: **Grab & Go Breakfast-** \$1.50 (muffin or breakfast wrap with fruit and the choice of milk or juices) and **Lunch - \$5.00** (choice of chicken patty sandwich and fries, hamburger and fries, or a slice of pizza and fries; including a salad, as well as fresh fruit, and milk or juice). Other snack items will also be available for purchase. Breakfast will be served from 8:00 to 9:30 a.m. and Lunch will be from 11:00 a.m. to 1:00 p.m. Please remind students that food **MUST** not leave the café at any time during the event.
- **High School Chapters** are reminded we will be following the rules found in the 2017-2018 HIGH SCHOOL - NATIONAL TSA COMPETITIVE EVENTS GUIDE/PDF.

- **L.E.A.P. Resume'** will be required for ALL Events including Tech bowl and Tech Problem Solving.
- **ALL MAIL IN COMPETITIONS SHOULD LABEL THEIR DOCUMENTS WITH STUDENT ID AND NAME OF EVENT. NO school name or student name should be identified.**
- **ALL FLASH DRIVES SHOULD BE PLACED IN A ZIP-LOCK BAG WITH STUDENT ID AND NAME OF EVENT**
- **Architectural Design:** competition will be Portfolio Only (all floor plans, a site plan, details and four exterior elevations for 2 metal shipping containers). **No Models Will Be Judged. See National website – Competitions / Themes and Problems**
<http://tsaweb.org/sites/default/files/HS%20Architectural%20Design%20%281%292017-2018%20Final.pdf>

Additional 2018 challenge details:

- **Architectural Design:** The revolution seems to continue with the new focus across America of individuals choosing to seek out and select tiny houses as an alternative to more traditional choices. Many young people are opting for a streamlined and modest way of living. They don't want large yards to take care of, or large houses to maintain. There are many older adults who also are looking for similar living accommodations – a result of changes in their lives and lifestyles. The design must include a main living area, kitchen facilities, laundry facilities, a half bath, a full bathroom, and two full bedrooms. The finished structure must be designed and built using only two (2) 40' (external dimensional reference) steel shipping containers. PLEASE SEE LINK ABOVE FOR DETAILED DESCRIPTION.
- **CAD – Architectural & 3D Engineering:** Northern Cambria Middle School, will provide PC computers with Autodesk software for these events. Questions concerning types of software can be directed to Ed Link – elink@ncsd.k12.pa.us If your school uses a different platform and/or software program, you MUST bring your own equipment. Please E- mail Ed Link if you are bringing your own computers. All CADD problems will be judged using the monitor screen only. Students must bring a USB drive to back up their projects while in competition.
- **Computer Integrated Manufacturing (CIM):** Problem- Create a promotional TSA Product that will showcase the current conference city and/or state (Atlanta, GA). Additive or subtractive manufacturing, CNC, 3D Printing, or Laser technology is acceptable.
- **Dragster Design:** Dragster specifications change (USE THE 2018 VERSION). See National Website-Competitions/Updates for specifications. PA-TSA Region 8 will supply All CO2 cartridges.
- **Essays on Technology: Regional Theme:** *Has the use of phones from a young age decreased the desire to go outside and have a face to face interaction.* Must be submitted in **PDF format** by e-mail to Ed Link – elink@ncsd.k12.pa.us , **No Later Than Monday, January 22, 2018.**

- **Future Technology Teacher:** Research 2 colleges/universities that offer Technology Ed Education programs. Submit essay, letter of recommendation and lesson plan. Present lesson live.
- **On-Demand Video:** Students must bring all video production equipment and laptop for editing footage.
 - ✓ Final Video Must be Submitted on Flash Drive
- **Structural Design & Engineering:** Research Bridge Crane structures and develop a design for a bridge crane that meets the specifications in this problem statement. Refer to the latter portion of this problem statement before you continue, check drawings and resources provided that will help you better understand the nature of the project.) **2018 addition of a storage box for all components is required.**

Please refer to the **STRUCTURAL DESIGN AND ENGINEERING 2016 PROBLEM STATEMENT-**

<http://tsaweb.org/sites/default/files/HS%20Structural%20Design%20and%20Engineering%20FINAL%20draft%20%28003%29.pdf>

- **System Control Technology:** Advance Notice of the Problem for (level II), will be sent out to **the Chapter Advisor(s) by November 13, 2017, by Region 8 Coordinator, Brandt Hutzel.** No on-site construction permitted! All submissions will be quarantined upon arrival.
- **Technology Bowl – Written:** (ALL levels) will be given in the morning. ***Preferred that entire team take test together.*** **KNOW INDIVIDUAL AND TEAM NUMBERS** There will be a “head-to-head” (oral) competition for the top four teams **ONLY** in the afternoon. (Dress code “B” Professional for oral competition)
- **Webmaster:** All entries must be posted to the web, (with the site location (URL) e-mailed to Ed Link at elink@ncsd.k12.pa.us,) no later than **Monday, January 22, 2018.**
- **Interviews:** Students should be prepared for interviews in the following competitive events:

Animatronics	Engineering Design	Promotional Graphics
Architectural Design	Fashion Design	Photographic Tech
Biotechnology Design	Manufacturing Prototype	Digital Video Production
PA-Materials Process	PA-Safety Illustration	PA-Logo Design

Interviews **WILL NOT** be scheduled unless requested by the judges for that event. *Again, competitors in these events should be prepared for the possibility of an interview. (Dress Code)*

➤ **Mail in Events:**

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| 3D Animation | Digital Video Production | SciVis |
| Children’s Stories | Essays on Tech | Software Development |
| Coding | Music Production | Video Game Design |
| | Photographic Tech | Webmaster-URL |

ALL above events must be submitted by **MAIL, E-MAIL, OR SHARED GOOGLE DRIVE** and **Postmarked No Later Than Monday, January 22, 2018 OR Time Stamp of 11:59PM** to:

Northern Cambria High School

813 35th Street

Northern Cambria PA 15714

Attn: ED LINK

Email: elink@ncsd.k12.pa.us

Shared: elink@ncsd.k12.pa.us

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| ➤ <u>Sign-up events:</u> Animatronics | Chapter Team | CIM |
| Debating Tech Issues | Extemp Speech | Fashion Design |
| Future Tech Teacher | Prepared Presentation | STEM Careers |

ALL the above events will require students to sign up prior to 9:30 for an interview and/or presentation time. Signup sheets will be placed on the door that is listed in the program. LEAP RESUME' documents will be collected by judges at this time.

- Ribbons will be awarded for First place, Second place and Third place. Qualifiers beyond Third place will be based on the total contestants per contest. See the on-line **Pennsylvania TSA Handbook** for details.
- Project feedback is very valuable to the students. Please encourage students to include the **Feedback forms** with their projects, binders etc...Feedback sheets are available on the Region 8 website. (THIS SHEET IS **DIFFERENT** from the judge's evaluation sheet).