2017 NJ TSA Middle School Supplement

NEW JERSEY

TSA

TECHNOLOGY STUDENT ASSOCIATION

"Learning to Lead in a Technical World"

Cover Art Inspired By:

Christopher Magsino
Howell Middle School North
1st Place Promotional Marketing
2016 NJ TSA State MS Conference

2016-2017 New Jersey TSA
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Foreword

The diverse competitive events that are listed within this booklet are open to TSA chapters affiliated through registration with the New Jersey state office of TSA, completed by January 31, 2017. The Middle School State Conference will be held at The College of New Jersey on March 29, 2017.

How this booklet works

The *NJ Supplement* works in conjunction with the National TSA Competitive Events Guide, which you will receive access to online after affiliation with the National TSA Office has taken place.

This booklet presents the competitive events offered at the NJ State Conference in alphabetical order as well as the maximum number of participants or teams permitted to compete from each chapter. Each New Jersey competitive event in this booklet lists only the modifications from the National guidelines. Substitute the NJ modification in this booklet for the number or letter on the National guidelines to ensure that your chapter meets the guidelines for the NJ Competitive Events.

Competitive Event Categories

Competitive Events are organized according to the requirements for student participation in those competitions. There are three categories: **On-Site, Pre-Conference and Static**.

"On-site Events" require student participation on conference day. Some On-Site Events may even include components that must be completed and submitted prior to conference day. Because of the time commitment involved, students may participate in only one On-Site Event (and no more than four total events).

"Pre-Conference Events" require that entries be submitted prior to the conference, on a designated submission date established by NJ TSA. These entries are judged days prior to the conference and put on display the day of the conference. Some Pre-Conference events may have components or presentations that also take place the day of the conference.

"Static Events" require students to submit entries on conference day, however, students are not required to remain with their entries or make presentations. Static Events usually consist of students creating a display or prototype. These entries are checked-in the morning of the conference in the designated event room listed in the conference program. Judging takes place behind closed doors. After judging is finished, all entries are put on display for the remainder of the conference day.

Please be sure to read all sections of the *Supplement* carefully!

It is the hope of the NJ TSA Executive Committee that this guide will enable teachers, advisors, students and competitive event judges to be better prepared for participation at the State Conference this spring.

Any questions may be directed to Ms. Alison Goeke, NJ TSA State Advisor at (609)771-3244 or goeke2@tcnj.edu or Henry Harms, NJ TSA Competitive Event Coordinator, at harms@tcnj.edu.

General Rules Governing Competitive Events

I.   MIDDLE SCHOOL EVENTS

The officially approved **Level I** New Jersey TSA Competitive Events are:

ON-SITE	PRE-CONFERENCE	STATIC
Catapult Design 2 teams of up to 4 members per chapter	**Biotechnology** 2 teams per chapter	**System Control Technology** 2 teams of 3 members per chapter
Challenging Technology Issues 2 teams of 2 members per chapter	**CAD Foundations** 2 individuals per chapter	
Chapter Team 1 team of 6 members per chapter	**Career Prep** 2 individuals per chapter	
Construction Challenge 2 teams per chapter	**Children's Stories** 1 team or individual per chapter	
Electrical Applications 2 individuals per chapter	**Community Service Video** 1 team or individual per chapter	
Environmental Engineering 1 team per chapter	**Digital Photography** 2 individuals per chapter	
Essays on Technology 2 individuals per chapter	**Dragster** 2 individuals per chapter *(Top 16 cars raced on conference day)*	
Flight 2 individuals per chapter	**Geospatial Technology** 2 teams of 2-5 members per chapter	
Forensic Technology 1 team of 2 members per chapter	**Mass Production** 2 teams of 2 or more members per chapter	
Inventions and Innovations 1 team of at least 3 members per chapter	**Medical Technology** 2 teams of 2 or more members per chapter	
Junior Solar Sprint 1 team of 2-4 members per chapter	**Promotional Marketing** 2 individuals per chapter	
Leadership Strategies 2 teams of 3 members per chapter	**STEM Animation** 2 teams per chapter	
Microcontroller Design 2 teams of 3-5 members per chapter	**Technical Design** 2 teams of 2 members per chapter	
Prepared Speech 2 individuals per chapter	**Video Game Design** 1 team of 2-6 members per chapter	
Problem Solving 1 team of 2 members per chapter	**Website Design** 1 team of 3-6 members per chapter	
Structural Engineering 1 team of 2 members per chapter		
Tech Bowl 1 team of 3 members per chapter		

II.   PROJECT SUBMISSION

A. <u>On-site</u> events require students to submit entries, make presentations and/or participate/compete in activities *at* the conference.

B. <u>Static events</u> require students to submit a display or prototype the day of the conference, however, there is no presentation component along with the entry.

C. <u>Pre-Conference</u> events require projects to be submitted and judged *prior to* the conference

1. Pre-Conference entries mailed must be received by **March 15, 2017**

   Send to:
    NJ TSA/Alison Goeke
    The College of New Jersey
    2000 Pennington Rd
    Armstrong 103
    Ewing, NJ 08628

   Please call (609)771-3244 or email (tsa@tcnj.edu) the NJ TSA office to indicate description/quantity of items being mailed and expected delivery date.

2. Entries dropped off at the NJ TSA office at The College of New Jersey must be received by **March 15, 2017**. Please call (609)771-3244 or email (tsa@tcnj.edu) the TSA office to arrange time for delivery.

3. A Northern NJ drop off site will be available on **March 14, 2017** from 3:30-5:00pm at Heritage Middle School, 20 Foxcroft Drive, Livingston, NJ 07039.

- Items received after these dates may not be included in competitions.
- Mailed deliveries should include provision for obtaining **proof of delivery**.
- Packages should include a label or packing slip describing contents.

III.   PARTICIPATION IN COMPETITIVE EVENTS

A. TSA members may only register and participate in **ONE on-site event**, and no more than **SIX total events**.
B. Students must be registered at the state conference in order to enter and become finalists/winners in a competition. NO ON-SITE OR LATE REGISTRATIONS WILL BE ACCEPTED.
C. **No substitutions will be accepted after registration closes, or at the conference**. Substitutions in team events will be accepted only from pre-registered applicants, and only under extenuating circumstances.

D. **No school or individual names labeled on projects** except for <u>Community Service Video</u> which require school information. **Otherwise only ID#'s are to be used.** Upon

registering students online for the state conference, they are automatically assigned a state conference ID#. **This state conference ID number needs to be labeled on every piece of a project/entry (i.e. binders, CD's/DVD's, USB drives, models, displays, copyright/release forms, etc.).**

E. For all entries that require documentation materials (comprising a "portfolio") secured in a **CLEAR FRONT REPORT COVER**, visit this site for a sample report cover.

F. Please be sure to make a copy of all video/electronic files (e.g. Promotional Marketing, STEM Animation, etc.) for yourself before the project is submitted.

G. Projects/entries are picked up at the time stated in the conference program and/or event display room. All entries not accounted for will be discarded the following day if no arrangements have been made with the NJ TSA office otherwise.

H. Audio visual equipment will be provided for those competitive events that require it (e.g. laptops, projectors, etc.).

I. NJ TSA is not responsible for compatibility issues with electronic files. Judges will not be permitted to install programs to view files.

J. Proper procedures for citing material taken from other sources must be followed as outlined in specific competitive event guidelines. Copyright procedures and forms must be completed and submitted with entries when necessary.

K. No electronic communication devices of any kind are permitted during competitions and will result in disqualification.

L. No one will be permitted to leave a test event and return unless otherwise instructed by judges.

M. The maximum size of a team is 6 members, unless otherwise designated in a competition's eligibility guideline.

N. In addition to the information found in the NJ Supplement, participants are responsible for knowing any updates, changes or clarifications that are made to competitive events prior to participation. This information is posted on both the National TSA and NJ TSA websites. It is crucial that students check the Competition Updates page of BOTH the NJ and National TSA websites. DIFFERENT information is posted on each site.

IV. COMPETITIVE EVENTS ATTIRE

ALL STUDENTS ATTENDING THE CONFERENCE **MUST** wear either official TSA or business-like attire. Your cooperation with this policy will assist in providing a positive image for the organization and its members. *For more info go to: http://www.tsaweb.org/Dress-Code*

NOTE: All students participating at the 2017 National TSA Conference will be required to wear the Official TSA Shirt (royal blue). Students are strongly encouraged to wear the Official TSA Shirt to the 2017 NJ TSA State Conference.

A. Official TSA Attire:
Blazer: navy blue with official TSA patch
Tie: scarlet red imprinted with official TSA logo (for males only)
Shirt or blouse: Official TSA Shirt (royal blue) (A white button-down with turn down collar may be substituted for the Official TSA Shirt at the NJ State Conference)
Pants or skirt: light gray
Dark socks: males only (black or dark blue)
Shoes: black dress shoes (unacceptable: athletic shoes, combat or work boots)
Sandals: females only may wear black open toe shoes or sandals

B.   Business-like attire is considered to minimally include:
A collared shirt/blouse, long pants (no shorts or jeans), dresses/skirts, socks/hosiery and appropriate footwear.

C.   The official NJ TSA or National TSA Polo Shirt may be substituted for a collared shirt/blouse.

Students not wearing official TSA or business-like attire *will lose 20 points from their total score of each event entered and will not be granted entry into the awards ceremony.*

A 20 point deduction will also result from the wearing of hats.

All individuals attending the awards ceremony <u>must</u> present their official State Conference ID Badge provided to them at registration. Anyone not in possession of their badge will not be admitted to the awards ceremony.

V.   PROPERTY DAMAGE OR LOSS

The College of New Jersey and NJ TSA are not responsible for damage to or loss of property brought to the conference.

VI.   AWARDS

<u>TSA Achievement Program</u>
The TSA Achievement Program (bronze, silver, gold awards) is designed to motivate and recognize student members for high effort in a school's technology education program. Bronze, silver, and gold pins will be awarded at the Middle School State Conference. Please provide Alison Goeke (goeke2@tcnj.edu / Fax# 609-771-3330) with completed forms/Activity Resumes by *5:00pm on March 15, 2017*. Go to http://www.tsaweb.org/Student-Achievement-Awards to view and print forms.

<u>TSA Technology Honor Society</u>
The TSA Technology Honor Society recognizes TSA members who excel in academics, leadership, and service to their school and community. The TSA Technology Honor Society is (1) an opportunity for student members to be recognized for their efforts and (2) designed to recognize TSA members who exemplify the high ideals of academics. Please send completed forms to Alison Goeke (goeke2@tcnj.edu/Fax#609-771-3330) by *5:00pm on March 15, 2017*. Go to http://www.tsaweb.org/Student-Achievement-Awards to view and print forms.

VII. IMPORTANT DATES AND DEADLINES

January 16, 2017
- State Conference Registration OPENS

January 16, 2017
- Design Problems for the following events posted on the NJ TSA website:
  - CAD Foundations
  - System Control Technology

- Note- all other design problems/themes for 2017 can be found on the National TSA website

March 2, 2017
- Technical Design brief posted at 5pm on NJ TSA website

March 7, 2017
- Technical Design entries must be received by the NJ TSA office, or postmarked, by 5pm.

March 14, 2017
- All Pre-Conference entries delivered to the Northern NJ Drop-Off Site must be received.

March 15, 2017
- All Pre-Conference entries must be received at the NJ TSA office.

March 15, 2017
- Achievement Award, Technology Honor Society and State Officer Nominations must be received at the NJ TSA office by 5pm.

March 16, 2017
- State Conference Registration CLOSES at 5pm (absolutely no changes can be made after this time).

March 29, 2017
- NJ TSA Middle School State Conference, The College of New Jersey

June 21-25, 2017
- National TSA Conference, Orlando, Florida

Plan now to attend the
39th Annual
National TSA Conference
June 21-25, 2017
Rosen Shingle Creek
Orlando, Florida
Theme: *"Defining Your Future"*

Level I – Middle School Events

Biotechnology
Pre-Conference Event

OVERVIEW:	No semifinalists. No presentation/interview. Documentation and display submitted Pre-Conference.
ELIGIBILITY:	A. 2 teams per chapter B. No presentation/interview
TIME LIMITS	Delete B.
PROCEDURE:	D. Include instructions or photos for display set up if necessary. E. No Semifinalists Delete F-G.
REGULATIONS:	Delete E. ***No school or individual names labeled on projects; only ID#'s are to be used.*** *Upon registering students online, they are automatically assigned an ID#.* ***This number needs to be on all parts of student projects.***
EVALUATION:	Evaluation will be based on 90 points.

CAD Foundations
Pre-Conference Event
2017 Design Problem will be posted on the NJ TSA website on January 16, 2017

OVERVIEW:	No change This design problem will be posted on the NJ TSA website on January 16, 2017.
ELIGIBILITY:	2 individuals per chapter
TIME LIMITS	Delete A-C. Entries must be completed during the school year and are submitted Pre-Conference. There is no on-site component. Design problem will be posted on the NJ TSA website on January 16, 2017.
PROCEDURE:	Delete A-H. Entries are submitted Pre-Conference. Entries are picked up at the time and place stated in the conference program.
REGULATIONS:	Delete A-D. Delete F-G. Designs submitted on a maximum paper size of 24" x 36" or smaller sheets mounted on a 24" x 36" sheet with no overlapping papers. ***No school or individual names labeled on projects; only ID#'s are to be used.*** *Upon registering students online, they are automatically assigned an ID#.* ***This number needs to be on student projects.***
EVALUATION:	Delete "on-site problem." Entries are submitted Pre-Conference.

Career Prep
Pre-Conference Event
In 2017 students choose one (1) of these careers:
- Environmental engineer
- Cloud infrastructure architect
- Bioengineer
- Computer repair technician

OVERVIEW:	No semifinalists. No interview. Letter and resume submitted Pre-Conference.
ELIGIBILITY:	2 individuals per chapter
TIME LIMITS	Delete B.
PROCEDURE:	Delete B. C. Letter and resume are submitted Pre-Conference. Delete D-F. *Please be sure that submissions have fictitious home contact information, social security number, and telephone number when completing application.*
REGULATIONS:	D. Letter and resume are submitted Pre-Conference. Delete E. *Please be sure that submissions have fictitious home contact information, social security number, and telephone number when completing application.* **No school or individual names labeled on projects; only ID#'s are to be used.** Upon registering students online, they are automatically assigned an ID#. **This number needs to be on student projects.**
EVALUATION:	No semifinalists. No interview. Evaluation is based on 70 points.

Catapult Design
On-Site Event

OVERVIEW:	No change
ELIGIBILITY:	2 teams of up to 4 members per chapter.
TIME LIMITS	No change
PROCEDURE:	No change
REGULATIONS:	No change ***No school or individual names labeled on projects; only ID#'s are to be used.*** *Upon registering students online, they are automatically assigned an ID#.* ***This number needs to be on all parts of student projects.***
EVALUATION:	No change

Challenging Technology Issues
On-Site Event

OVERVIEW:	No change
ELIGIBILITY:	2 teams of 2 members per chapter
TIME LIMITS:	No change
PROCEDURE:	Delete E-F. No semifinalists
REGULATONS:	No Change
EVALUATION	No Change

Chapter Team
On-Site Event

OVERVIEW:	No semifinals. All teams participate in the oral presentation.
ELIGIBILITY:	1 team of 6 members per chapter. Team members do not have to be elected officers of the local chapter. No semifinalists. All teams take the written test and participate in the oral presentation.
TIME LIMITS	B. No semifinalists. All teams make oral presentation. Winners are announced at award ceremony. Time-related penalties apply.
ATTIRE:	Participants may wear **Official TSA Attire OR Business-Like Attire**, as described on Page 6-7 of this guide.
PROCEDURE:	C-D. No semifinalists. All teams will make the oral presentation. Winners are announced at Awards Ceremony.
REGULATIONS:	C. No semifinalists. All teams participate in the oral presentation. I. Delete the word "Semifinalists"
EVALUATION:	No Semifinalists. All teams participate in the written and oral portions of the event.

Children's Stories
Pre-Conference Event
2017 Theme: The History of Technology

(Students may choose a device, and do a past, present, and future look at its development; OR, they may choose to do a timeline of how technology has developed over the centuries.)

OVERVIEW:	No change
ELIGIBILITY:	1 team per chapter. A team of 1 individual is permitted.
TIME LIMITS	No semifinalists. No on-site component. Portfolio/story submitted Pre-Conference
PROCEDURE:	Delete D-G. Portfolio/story submitted Pre-Conference. No semifinalists. No on-site component. I. 1st, 2nd and 3rd place winners will be announced at award ceremony.
REGULATIONS:	Delete J-K. No semifinalists. No on-site component. ***No school or individual names labeled on projects; only ID#'s are to be used.*** *Upon registering students online, they are automatically assigned an ID#.* ***This number needs to be on all parts of student projects.***
EVALUATION:	Evaluation is based on 150 points for documentation and story. No semifinalist reading/interview.

Community Service Video
Pre-Conference Event

OVERVIEW:	No change.
ELIGIBILITY:	1 team per chapter. Entries may be submitted by an individual or group
TIME LIMITS	No change.
PROCEDURE:	A. Entries submitted Pre-Conference D. No finalists. 1st, 2nd and 3rd place winners will be announced at award ceremony.
REGULATIONS:	Delete G.
EVALUATION:	No change.

Construction Challenge
On-Site Event

OVERVIEW:	No semifinalists. All teams participate in presentation/interview.
ELIGIBILITY:	2 teams per chapter. No semifinalists. All teams participate in presentation/interview. 2-4 representatives per team for the presentation/interview.
TIME LIMITS	B. No semifinalists. All teams participate in presentation/interview.
PROCEDURE:	B-D. No semifinalists. All teams participate in presentation/interview.
REGULATIONS:	No change. ***No school or individual names labeled on projects; only ID#'s are to be used.*** *Upon registering students online, they are automatically assigned an ID#.* ***This number needs to be on all parts of student projects.***
EVALUATION:	No semifinalists. All teams participate in presentation/interview. Based on 120 points.

Digital Photography
Pre-Conference Event
2017 Theme: Standing Out from the Crowd

OVERVIEW:	No semifinalists. No on-site task. Winners announced at award ceremony.
ELIGIBILITY:	2 individuals per chapter
TIME LIMITS	Delete B-C. No on-site task.
PROCEDURE:	B. Entries submitted Pre-Conference. C. No semifinalists. No on-site task. Winners announced at award ceremony. Delete D-H.
REGULATIONS:	Delete C. No Semifinalist task. ***No school or individual names labeled on projects; only ID#'s are to be used.*** *Upon registering students online, they are automatically assigned an ID#.* ***This number needs to be on student projects.***
EVALUATION:	Evaluation is based on 100 points. No on-site task.

Dragster
Pre-Conference Event

OVERVIEW:	No change
ELIGIBILITY:	2 individuals per chapter. 1 entry per individual
TIME LIMITS	B. Dragster and drawing submitted Pre-Conference. C. No interview. ***Cars that do not meet specifications will NOT be raced***
PROCEDURE:	A. Dragster and drawing submitted Pre-Conference. Delete F. No interview.
REGULATIONS:	No change ***No school or individual names labeled on projects; only ID#'s are to be used.*** *Upon registering students online, they are automatically assigned an ID#.* ***This number needs to be on student projects.***
EVALUATION:	Interview eliminated from scoring. ***The top 16 dragsters meeting specifications will be raced in the double elimination bracket at the conference.*** ***Cars not meeting specs WILL BE DISQUALIFIED from competition. Evaluation is based on 105 points.*** ***No school or individual names labeled on projects; only ID#'s are to be used.*** *Upon registering students online, they are automatically assigned an ID#.* ***This number needs to be on student projects.*** ***Place ID# on drawings and directly on dragster. It is recommend ID#'s are placed on bottom or back side of dragster with tape or label.***

Electrical Applications
On-Site Event

OVERVIEW:	Written test only. No semifinalists. No on-site problem or interview. Winners announced at award ceremony.
ELIGIBILITY:	2 individuals per chapter
TIME LIMITS:	Delete B. No on-site problem or interview.
PROCEDURE:	C. No semifinalists. Delete D-F.
REGULATIONS:	A. Answer sheets, paper and pencils provided. Delete B-F.
EVALUATION:	Evaluation is based on the written test only (50 points)

Environmental Engineering
On-Site Event
2017 Topic: Hydraulic Fracturing

OVERVIEW:	No semifinalists. All teams do presentation/interview.
ELIGIBILITY:	1 team per chapter. No semifinalists. All teams participate in presentation and interview. 2 or 3 representatives per team conduct presentation.
TIME LIMITS	B. No semifinalists. All teams participate in presentation and interview.
PROCEDURE:	D-F. No semifinalists. All teams participate in presentation and interview.
REGULATIONS:	D. No semifinalists. All teams participate in presentation/interview. E. Computer/projector provided by NJ TSA. Presentation should be brought on USB flash drive. F. No semifinalists. All teams participate in presentation/interview. ***No school or individual names labeled on projects; only ID#'s are to be used.*** *Upon registering students online, they are automatically assigned an ID#.* ***This number needs to be on all parts of student projects.***
EVALUATION:	No semifinalists. All teams participate in presentation and interview. Winners announced at Awards Ceremony. Evaluation based on 140 points.

Essays on Technology
On-Site Event

2017 Topic: An unmanned aerial vehicle (UAV) is an aircraft that carries no human pilot or passengers. With the increased popularity and use of UAV's — sometimes called "drones" — the Federal Aviation Administration now requires that they be registered. Students must research all of the following <u>subtopics</u> and be prepared to write an essay on one subtopic that will be designated on site at the conference:

Subtopic 1: The emerging technology of UAV's, including how they work and what role they might play in the future.

Subtopic 2: The uses of UAV's, including personal, business, and government.

Subtopic 3: The registration of UAV's, including the need, penalties, and controversies.

OVERVIEW:	No change
ELIGIBILITY:	2 individuals per chapter
TIME LIMITS	No semifinalists. All participants write outline (1 hour) and essay (1 hour).
PROCEDURE:	C. Paper & writing utensils provided. H-I. No semifinalists. All participants write essay. J-K. No finalists. Winners will be announced at award ceremony
REGULATIONS:	M. No semifinalists. All participants write essay. C. Pens provided.
EVALUATION:	Evaluation is based on 180 points for outline and essay.

Flight
On-Site Event

OVERVIEW:	Students bring completed glider and portfolio to event.
ELIGIBILITY:	2 individuals per chapter
SAFETY:	Safety glasses are not required for this event.
TIME LIMITS	Delete A. Students bring completed glider to event
PROCEDURE:	A. Participants report to event area with their glider and portfolio. B-C. Glider is constructed off-site. E. No Finalists. Winners are announced at Awards Ceremony.
REGULATIONS:	Delete A. Safety glasses are not required for this event. E-I. Plane built off-site using specified materials. Catapult provided by NJ TSA. ***No school or individual names labeled on projects; only ID#'s are to be used.*** *Upon registering students online, they are automatically assigned an ID#.* ***This number needs to be on all parts of student projects.***
EVALUATION:	No change

Forensic Technology
On-Site Event

OVERVIEW:	No semifinalists. All teams take written test and analyze mock crime scene. Winners announced at award ceremony.
ELIGIBILITY:	1 team of 2 members per chapter.
TIME LIMITS:	B. No semifinalists. All teams analyze mock crime scene.
PROCEDURE:	C-D. No semifinalists. All teams participate in on-site problem.
REGULATIONS:	A. No semifinalists. All teams participate in on-site problem.
EVALUATION:	No semifinalists. Evaluation is based on the team's written test score and performance on the on-site problem.

Geospatial Technology
Pre-Conference Event
2017 Design Brief: http://www.tsaweb.org/Themes-and-Problems

OVERVIEW:	No semifinalists. No on-site problem. Portfolio submitted Pre-Conference.
ELIGIBILITY:	2 teams of 2-5 members per chapter.
TIME LIMITS	Delete B-C. No semifinalists. No on-site problem. Portfolio submitted Pre-Conference.
PROCEDURE:	Delete C-F. No semifinalists. No on-site problem. Portfolio submitted Pre-Conference. G. All entries become the property of NJ TSA.
REGULATIONS:	Delete A. Delete C-D. E. Entries become the property of NJ TSA. ***No school or individual names labeled on projects; only ID#'s are to be used.*** *Upon registering students online, they are automatically assigned an ID#.* ***This number needs to be on student projects.***
EVALUATION:	Based on 70 points for the documentation portfolio. No semifinalist problem or interview.

Inventions and Innovations
On-Site Event

OVERVIEW:	No semifinalists. All teams participate in oral presentation and interview.
ELIGIBILITY:	1 team of at least 3 members per chapter. 1 entry per team.
TIME LIMITS	No semifinalists. All teams participate in oral presentation and question/answer session
PROCEDURE:	Pre-conference: No change Conference: C-D. No semifinalists. All teams will make an oral presentation. F. No finalists. Winners announced at award ceremony.
REGULATIONS:	E. No semifinalists. All teams make oral presentation. ***No school or individual names labeled on projects; only ID#'s are to be used.*** *Upon registering students online, they are automatically assigned an ID#.* ***This number needs to be on all parts of student projects.***
EVALUATION:	No semifinalists. All teams make oral presentation. Based on 150 points. Winners announced at Award Ceremony.

Junior Solar Sprint
On-Site Event

OVERVIEW:	No change
ELIGIBILITY:	1 team of 2-4 members per chapter. 1 entry per team.
TIME LIMITS	No change
PROCEDURE:	No change
REGULATIONS:	No change ***No school or individual names labeled on projects; only ID#'s are to be used.*** *Upon registering students online, they are automatically assigned an ID#.* ***This number needs to be on all parts of student projects.***
EVALUATION:	In the event of inclement weather, evaluation will be based on 90 points for the model and documentation (no race).

Leadership Strategies
On-Site Event

OVERVIEW:	No change
ELIGIBILITY:	2 teams of 3 members per chapter
TIME LIMITS	No change
PROCEDURE:	Delete H-J. No semifinalists. All teams make a presentation.
REGULATIONS:	E. No semifinals. All teams make a presentation.
EVALUATION:	No change

Mass Production
Pre-Conference Event
2017 Theme: Create and produce a charging station for phones or tablets; three identical copies of the product must fit together in a cube that measures 24 inches x 24 inches x 24 inches.

OVERVIEW:	No change
ELIGIBILITY:	2 teams of 2 or more members per chapter. No semifinalists. No interview/presentation. Entries are submitted Pre-Conference.
TIME LIMITS	No change
PROCEDURE:	B. Entries are submitted Pre-Conference. C-F. No semifinalists. No presentation/interview. Winners are announced at award ceremony.
REGULATIONS:	No change ***No school or individual names labeled on projects; only ID#'s are to be used.*** *Upon registering students online, they are automatically assigned an ID#.* ***This number needs to be on student projects.***
EVALUATION:	Based on the documentation and product (110 points). No semifinalist presentation/interview.

Medical Technology
Pre-Conference Event

OVERVIEW:	No semifinalists. No presentation. Entries are submitted Pre-Conference.
ELIGIBILITY:	2 teams of 2 or more members per chapter. No semifinalists. No presentation. Entries submitted Pre-Conference.
TIME LIMITS	Delete B.
PROCEDURE:	Delete C-F. No semifinalists. No presentation. Entries submitted Pre-Conference.
REGULATIONS:	Delete E. No semifinalist presentation. ***No school or individual names labeled on projects; only ID#'s are to be used.*** *Upon registering students online, they are automatically assigned an ID#.* ***This number needs to be on student projects.***
EVALUATION:	Evaluations will be based on 110 points for documentation and display.

Microcontroller Design
On-Site Event
2017 Challenge: Create a product (example: a moisture or air quality sensor) that monitors and reports on environmental conditions.

OVERVIEW:	No change
ELIGIBILITY:	2 teams of 3-5 members per chapter. Up to 3 team members may participate in the presentation.
TIME LIMITS	No change
PROCEDURE:	No change
REGULATIONS:	No change ***No school or individual names labeled on projects; only ID#'s are to be used.*** *Upon registering students online, they are automatically assigned an ID#.* ***This number needs to be on all parts of student projects.***
EVALUATION:	No change

Prepared Speech
On-Site Event
2017 Theme: Defining Your Future

OVERVIEW:	No change
ELIGIBILITY:	2 individuals per chapter
TIME LIMITS	No change
PROCEDURE:	C. No semifinalists. All students make speech. Delete D-F. No semifinalists. All students make speech. Winners announced at award ceremony.
REGULATIONS:	No change
EVALUATION:	No change

Problem Solving
On-Site Event

OVERVIEW:	No change
CHALLENGE:	No change
ELIGIBILITY:	1 team of 2 members per chapter
TIME LIMITS	Change time from 2 to 1.5 hours.
PROCEDURE:	C-E. All equipment/materials provided by NJ TSA F. Teams are allowed 1.5 hrs. to design and construct solution. H. No finalists. Winners announced at award ceremony.
REGULATIONS:	Delete B-C. All equipment/materials provided by NJ TSA
EVALUATION:	Will be based on a scoring guide provided at the event.

Promotional Marketing
Pre-Conference Event

OVERVIEW:	No semifinalists. No on-site problem. Entries submitted Pre-Conference.
ELIGIBILITY:	2 individuals per chapter. 1 entry per individual.
TIME LIMITS	Delete B-C. No semifinalists. No on-site problem.
PROCEDURE:	B. Entries are submitted Pre-Conference C. No semifinalists. Delete D-F
REGULATIONS:	G. Entries are submitted Pre-Conference. Files are to be in PDF format and submitted on a USB flash drive. Delete H-J. No on-site problem. ***No school or individual names labeled on projects; only ID#'s are to be used.*** *Upon registering students online, they are automatically assigned an ID#.* ***This number needs to be on all parts of student projects.***
EVALUATION:	Based on 150 points for poster, fact sheet and t-shirt design.

STEM Animation
Pre-Conference Event

OVERVIEW:	No semifinalists. No presentation. Entries submitted Pre-Conference.
ELIGIBILITY:	2 teams per chapter. 1 entry per team.
TIME LIMITS	Delete D. No semifinalists. No presentation. Entries submitted Pre-Conference.
PROCEDURE:	Delete B-D. No semifinalists. No presentation. Winners are announced at award ceremony.
REGULATIONS:	Delete G. No presentation. H. Entries become the property of NJ TSA. ***No school or individual names labeled on projects; only ID#'s are to be used.*** *Upon registering students online, they are automatically assigned an ID#.* ***This number needs to be on student projects.***
EVALUATION:	Based on 80 points for the portfolio and animation. No semifinalist presentation.

Structural Engineering
On-Site Event
2017 Challenge: http://www.tsaweb.org/Themes-and-Problems
2017 Verification form: http://www.tsaweb.org/Themes-and-Problems

OVERVIEW:	All participants bring Pre-Built Structure, Three-View Drawing, Verification Form and Assessment Form on conference day to be evaluated/tested.
	There is no on-site semifinalist construction problem. All groups are present for testing of their Pre-Built Structures.
	No semifinalists/finalists. 1st, 2nd and 3rd place winners are announced at Awards Ceremony.
ELIGIBILITY:	1 team of 2 members per chapter, one entry per team
SAFETY EYEWEAR	Safety eyewear is not needed. There is no on-site construction problem.
TIME LIMITS	Delete B-C. No semifinalists. No on-site construction problem.
PROCEDURES/ REGULATIONS	PRE-BUILT STRUCTURE REGULATIONS No change PROCEDURE FOR ON-SITE DESTRUCTIVE TESTING OF PRE-BUILT STRUCTURES Delete D-E. No semifinalists. No on-site construction problem. REGULATIONS AND PROCEDURE FOR SEMIFINALIST ON-SITE CONSTRUCTION AND DESTRUCTIVE TESTING Delete A-R. No on-site construction problem. ***No school or individual names labeled on projects; only ID#'s are to be used.*** *Upon registering students online, they are automatically assigned an ID#. **This number needs to be on all parts of student projects.***
EVALUATION:	Based on the compliance and design efficiency of pre-built structure only.

System Control Technology
Static Event
2017 Design Problem will be posted on the NJ TSA website on January 16, 2017

OVERVIEW:	Model is constructed off-site during the school year. Design problem will be posted on the NJ TSA website on January 16, 2017.
ELIGIBILITY:	2 teams of 3 members per chapter
TIME LIMITS	Delete A. Design problem will be posted on the NJ TSA website on January 16, 2017. Model is constructed off-site. No on-site portion. There will be a 15 minute set up time on conference day (students set up their device at the location specified in the conference program, and leave instructions for evaluators to operate the device).
PROCEDURE:	Delete A-B. Students set up their device on conference day and leave instructions for evaluators to operate the device. C. Inventor's log is completed off-site. D-E. Model constructed off-site. Students set up their device on conference day and leave instructions for evaluators to operate the device.
REGULATIONS:	Delete G. No presentation. H. Entries become the property of NJ TSA. ***No school or individual names labeled on projects; only ID#'s are to be used.*** *Upon registering students online, they are automatically assigned an ID#.* ***This number needs to be on student projects.***
EVALUATION:	No change

Tech Bowl
On-Site Event

OVERVIEW:	All participants will complete a written exam and then participate in the oral event.
CHALLENGE:	No change
ELIGIBILITY:	1 team of 3 members per chapter participate in written and oral part of event
TIME LIMITS	A. 45 minutes B. All teams will participate in the oral competition.
PROCEDURE:	Follow procedures listed below. Do not refer to the *TSA Competitive Events Guide.* A. Following the written test, team members will report to the oral event area holding room for briefing at the designated time. After briefing, advisors must leave and the team will remain in the holding room until called for competition. Teams may visit with other teams; however, **no advisors or visitors** may enter the holding room. **B. No audience members are permitted into the oral event area.** C. When instructed to do so, two (2) teams will enter the event area and be seated according to instructions. D. When a team has been defeated in any round of the oral event, the team is out of the competition. E. Questions will be drawn, as needed, from a card file resource bank. F. A team's total score is derived from the correct answers to the questions asked. For each correct answer, a team will receive ten (10) points. When a question has been completely read and a team is recognized to answer, if the team does not answer or answers incorrectly, five (5) points will be deducted from the team's score. In this instance, the other team does not have the opportunity to respond to this question, and the next question is read for both teams. If is question is being read and a team member presses the button before the question is finished, the member must answer completely as stated on the answer card. If the answer given is incorrect, the entire question will be read for the other team. G. A total of twelve (12) questions will be asked per round. **No questions will be repeated in another round**. In the case of the tie, five (5) additional questions will be asked. This procedure will continue until the tie is broken. The questions will be picked at random from the basic areas tested.

	H. <u>Bonus Question</u> There will be one additional question (bonus question). The bonus question will be announced, and the team that answers it correctly will have the opportunity to answer one additional question. This is the only time when team members may consult with each other before giving an answer. The team will have ten (10) seconds to give its answer. If a team gives an incorrect answer to the bonus question, then the question will be read to the other team. Bonus point scoring: If a team answers the bonus correctly, that team receives fifteen (15) points; if a team answers the bonus incorrectly, that team loses five (5) points from its score.
	I. A panel of evaluators will be available to respond to questions concerning acceptable answers.
	   1. Rulings on acceptable answers will be made only during the round in question.
	   2. Rulings will be made immediately, to do one of the following:
	     a. Accept only the answers listed on the card.
	     b. Accept the student's answer and renew points, or remove the question and read another in its place.
	     c. The rulings of the panel will be final.

REGULATIONS:	<u>Follow procedures listed below. Do not refer to the *TSA Competitive Events Guide.*</u> A. No transmitting or recording devices will be permitted in the event area. No prompting will be permitted. B. The team member who "buzzes in" will have five (5) seconds to answer the question, without discussion. C. The team that answers the bonus question will be allowed ten (10) seconds to discuss the extra question and give an answer. D. After a question is read, the competing teams will have ten (10) seconds to answer. If neither team can answer the question, then another question will be read. E. If a team member "buzzes in" before a question is finished being read, that member must give the exact answer as printed on the card.
EVALUATION:	Evaluation is based on the total points from the three written tests plus the total points from the oral competition. Awards will be given to the top three (3) teams

Technical Design

Pre-Conference Event

2017 Design Problem will be posted on the NJ TSA website on March 2, 2017.
Entries must be received in the NJ TSA Office (or postmarked)
by 5pm on March 7, 2017.

OVERVIEW:	Problem is solved off-site. Design problem will be posted on the NJ TSA website on March 2, 2017. Entries must be received in the NJ TSA Office (or postmarked) by 5pm on March 7, 2017.
ELIGIBILITY:	2 teams of 2 members per chapter
TIME LIMITS	Participants will be allowed 2 (school) days to solve the engineering design problem. The design problem will be posted on the NJ TSA website on March 2, 2017 at 5pm. Entries must be received in the NJ TSA Office (or postmarked) by 5pm on March 7, 2017.
PROCEDURE:	A. The design problem will be posted on the NJ TSA website on March 2, 2017 at 5pm. Entries must be received in the NJ TSA Office (or postmarked) by 5pm on March 7, 2017.
REGULATIONS:	Delete G. No presentation. H. Entries become the property of NJ TSA. ***No school or individual names labeled on projects; only ID#'s are to be used.*** *Upon registering students online, they are automatically assigned an ID#.* ***This number needs to be on student projects.***
EVALUATION:	No change

Video Game Design
Pre-Conference Event

OVERVIEW:	No semifinalists. No on-site interview. Game and all required documentation submitted Pre-Conference. URL for the video game should be emailed to tsachall@tcnj.edu. All required documentation must be submitted as a <u>PDF attachment</u> to the email.
ELIGIBILITY:	1 team of 2-6 members per chapter. No semifinalists. No interview. Entries submitted Pre-Conference.
TIME LIMITS	B. Change submission date from May 15 to March 15, 2017. Send URL to tsachall@tcnj.edu. Include ID# and "Video Game Design" in subject line. Email verification of each team's entry will be made by March 15, 2017. Delete C. No semifinalists. No on-site interview. URL for the video game should be emailed to tsachall@tcnj.edu. All required documentation must be submitted as a <u>PDF attachment</u> to the email.
PROCEDURE:	B. Entries due on March 15, 2017. C. Entries are reviewed by evaluators prior to the NJ State Conference. Delete D-F. No semifinalists. No interview. Winners announced at award ceremony. URL for the video game should be emailed to tsachall@tcnj.edu. All required documentation must be submitted as a <u>PDF attachment</u> to the email.
REGULATIONS:	Delete G. No presentation. H. Entries become the property of NJ TSA. ***No school or individual names labeled on projects; only ID#'s are to be used.*** *Upon registering students online, they are automatically assigned an ID#.* ***This number needs to be on student projects.***
EVALUATION:	Based on 90 points for documentation and game design. No semifinalist interview.

Website Design
Pre-Conference Event
2017 Design Brief: http://www.tsaweb.org/Themes-and-Problems

OVERVIEW:	No semifinalists. No interview. Entries submitted Pre-Conference.
ELIGIBILITY:	1 team of 3-6 members per chapter. 1 entry per chapter. No semifinalists. No interview. Entries are submitted Pre-Conference.
TIME LIMITS	A. Change date from May 15 to March 15, 2017. URL must be emailed to tsachall@tcnj.edu. Include ID# and "Website Design" in subject line. B. Email verification of each team's entry will be made by March 16, 2017. All entries will be available to view at the State Conference. Delete C. No semifinalists. No interview.
PROCEDURE:	A. **Participants obtain the event design brief from the national TSA website at http://www.tsaweb.org/Themes-and-Problems (Criteria for the middle school and high school events are different.)** D. Entries are evaluated prior to the State Conference. Delete E-G. No semifinalists. No interview.
REGULATIONS:	H. No on-site interview. ***No school or individual names labeled on projects; only ID#'s are to be used.*** *Upon registering students online, they are automatically assigned an ID#.* ***This number needs to be on all parts of student projects.***
EVALUATION:	No interview. Evaluation based on 90 points for website development. URL's MUST be emailed to tsachall@tcnj.edu by 11:59pm EDT March 15, 2017. All emails will be time stamped and serve as proof of submitting project on time.