2018 NJ TSA High School Supplement

New Jersey Technology Student Association

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Marine Academy of Science and Technology
1st Place Promotional Graphics
2017 NJ TSA State High School Conference

2017-2018 New Jersey TSA
Executive Committee

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Competitive Event Coordinator

Mr. Henry Harms, Center for Excellence in STEM Education, Department of Technological Studies, School of Engineering, The College of New Jersey

Business Administrator

Ms. Rebecca Turner, Center for Excellence in STEM Education, Department of Technological Studies, School of Engineering, The College of New Jersey

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, 2018. The High School State Conference will be held at The College of New Jersey on April 14, 2018.

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 Mrs. 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. HIGH SCHOOL EVENTS

The officially approved **Level II** New Jersey TSA Competitive Events for high school are:

ON-SITE	PRE-CONFERENCE	STATIC
Animatronics 1 team per chapter	3D Animation 3 teams of 2-6 members per chapter	Architectural Design 1 individual or team per chapter
Biotechnology Design 1 team or 1 individual per chapter	Computer-Aided Design (CAD), Architecture 1 individual per chapter	Biomimicry 2 teams of 3-6 members per chapter
Chapter Team 2 team of 6 members per chapter	Computer-Aided Design (CAD), Engineering 1 individual per chapter	Optical Engineering 3 teams of 3-6 members per chapter
**Children's Stories 1 team or 1 individual per chapter *Documentation/story submitted Pre-Conference*	Digital Video Production 1 team or individual per chapter	System Control Technology 2 teams of 3 members per chapter
Coding 2 teams of 1-3 members per chapter	Dragster Design 2 individuals per chapter *Top 16 cars are raced on conference day*	Transportation Modeling 2 individuals per chapter
Computer Integrated Manufacturing (CIM) 2 teams of 2 members per chapter	Music Production 1 team or individual per chapter	
Debating Technological Issues 1 team of 2 members per chapter	On Demand Video 1 team of 2-6 members per chapter	
Engineering Design 1 team of 3-6 members per chapter	Photographic Technology 1 individual per chapter	
Essays on Technology 2 individuals per chapter	Promotional Design 2 individuals per chapter	
Extemporaneous Speech 1 individual per chapter	Scientific Visualization (SciVis) 3 teams or individuals per chapter	
**Fashion Design and Technology 2 teams of 2-4 members per chapter *Portfolio/garments submitted Pre-Conference*	Software Development 3 teams per chapter	
Flight Endurance 1 individual per chapter	STEM Careers 2 individuals per chapter	
**Future Technology Teacher 3 individuals per chapter *Documentation submitted Pre-Conference*	Video Game Design 1 team of 2-6 members per chapter	
Prepared Presentation 1 individual per chapter	Webmaster 1 team of 3-5 members per chapter	
**Structural Design and Engineering 1 team of 2 members per chapter *Bring Pre-Built Structure and Documentation*		
Technology Bowl 1 team of 3 members per chapter		
Technology Problem Solving 1 team of 2 members per chapter		
VEX Robotics 1 team of up to 6 members per chapter		
Event has both Pre-Conference and On-Site Components.		

II. PROJECT SUBMISSION

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

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

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

1. Pre-Conference entries mailed must be received by **March 22, 2018**.

   Send to:
   NJ TSA/Alison Goeke
   The College of New Jersey
   2000 Pennington Rd.
   103 Armstrong Hall
   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 22, 2018**. 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 21, 2018** 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 **FOUR 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 Webmaster, 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 ID# is different from their National TSA ID#). **This state conference ID number needs to be labeled on every piece of a project/entry (i.e. portfolios, 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. Music Production, Video Game Design, 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 competitive events that require it.
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, checklist 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 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 2018 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 2018 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:
collared shirt/blouse
long pants (no shorts or jeans)
dresses/skirts
socks/hosiery
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 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 must 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 TSA are not responsible for damage to or loss of property brought to the conference. Please remind students there is no need for them to bring any personal items such as laptops to the conference and that their personal belongings are their sole responsibility that they should not be left behind in any location on campus.

VI. SCHOLARSHIPS AND AWARDS

NJ TSA Future Technology Teacher Scholarship

The purpose of the NJ TSA Future Technology Teacher Scholarship is to support the mission of TSA by encouraging NJ TSA members to pursue careers as technology education teachers. A qualifying student will receive a $500 scholarship to use toward continuing their education. The recipient will be announced at the State Conference.

Click here to view application requirements.

Applications must be submitted by 5:00pm on March 22, 2018 to:

Alison Goeke, State Advisor
New Jersey Technology Student Association
The College of New Jersey
2000 Pennington Rd.
103 Armstrong Hall
Ewing, NJ 08628-0718
Fax: 609.771.3330

TSA Achievement Program

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 State Conference. Please provide Alison Goeke (goeke2@tcnj.edu/Fax#609-771-3330) with completed forms/Activity Resumes by *5:00pm on March 22, 2018*. Go to http://www.tsaweb.org/Student-Achievement-Awards to view and print forms.

TSA Technology Honor Society

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. Go to http://www.tsaweb.org/Student-Achievement-Awards to view and print forms. Please send completed forms to Alison Goeke (goeke2@tcnj.edu/Fax#609-771-3330) by *5:00pm on March 22, 2018*.

Johnson & Wales University

Scholarships will be awarded to 1st, 2nd and 3rd Place winners in the following events:

- Coding
- Computer-Aided Design, Engineering
- Engineering Design
- Promotional Design
- Webmaster

Scholarship amounts for use at Johnson & Wales University are as follows:

1st place winner	$1000
2nd place winner	$750
3rd place winner	$500

VII. IMPORTANT DATES AND DEADLINES

January 15, 2018
- State Conference Registration OPENS.

January 15, 2018
- Design Problems for the following events posted on the NJ TSA website:
  - Computer-Aided Design (CAD), Architecture
  - Computer-Aided Design (CAD), Engineering
  - Coding
  - Optical Engineering
  - System Control Technology

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

March 1, 2018
- On Demand Video theme posted at 5pm on NJ TSA website

March 6, 2018
- On Demand Video entries must be received at the NJ TSA office, or postmarked, by 5pm.

March 21, 2018
- All Pre-Conference entries delivered to the Northern NJ Drop-Off Site must be received.

March 22, 2018
- All Pre-Conference entries must be received at the NJ TSA office.

March 22, 2018
- NJ TSA Future Technology Teacher Scholarship, Achievement Award, Technology Honor Society and State Officer Nominations must be received at the NJ TSA office by 5pm.

March 23, 2018
- State Conference Registration CLOSES at 5pm (absolutely no changes can be made after this time).

April 11, 2018
- Prepared Presentation topic posted at 5pm on NJ TSA website

April 14, 2018
- NJ TSA High School State Conference, The College of New Jersey

June 22-26, 2018
- National TSA Conference, Atlanta, Georgia

Plan now to attend the
40th Annual
National TSA Conference
June 22-26, 2018
World Congress Center
Atlanta, Georgia
Theme: *"A Celebration of Success"*

Level II – High School Events

3D Animation

Pre-Conference Event

2018 Design Problem: http://www.tsaweb.org/Themes-and-Problems

OVERVIEW:	No on-site problem. No semifinalists. Entries submitted Pre-Conference. Participants solve the challenge posted on the National TSA website: http://www.tsaweb.org/Themes-and-Problems
ELIGIBILITY:	3 teams of 2-6 members per chapter.
TIME LIMITS:	Delete B-D. No on-site problem. No semifinalists. No interview. Entries submitted Pre-Conference.
LEAP LEADERSHIP RESUME/INTERVIEW:	LEAP Leadership Resume submitted Pre-Conference. No semifinalists. No interview.
ATTIRE	See Page 6-7 of this guide for required dress code.
PROCEDURE:	Delete A-D. USB flash drive, documentation and LEAP Leadership Resume submitted Pre-Conference (please see Page 5 of this guide for submission information). E. Participants pick up their entries on conference day, at the time and place stated in the conference program.
REGULATIONS:	Delete D-H. No on-site problem. No semifinalists. Entries submitted Pre-Conference. I. LEAP Leadership Resume submitted Pre-Conference. No semifinalists. No 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 student projects.***
EVALUATION:	Evaluation is based on 90 points: • Portfolio (40) • Animation (40) • LEAP Leadership Resume (10) No semifinalists. No on-site problem. No interview.

Animatronics

On-Site Event

2018 Theme: Create an interactive animatronic robot for a local zoo or aquarium.

OVERVIEW:	No change
ELIGIBILITY:	A. 1 team per chapter B. No semifinalists. No LEAP interview.
TIME LIMITS:	E. No semifinalists. No LEAP interview.
LEAP LEADERSHIP RESUME/INTERVIEW:	No semifinalists. No LEAP interview. LEAP Leadership Resume submitted at event check-in.
ATTIRE:	See Page 6-7 of this guide for required dress code.
PROCEDURE:	D. No semifinalists. 1st, 2nd and 3rd place winners announced at Awards Ceremony. E-F. No semifinalists. No LEAP interview.
REGULATIONS:	K. No semifinalists. No LEAP interview. LEAP Leadership Resume submitted at event check-in. ***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 200 points: • Documentation (50) • Demonstration Presentation/interview (50) • Model Appearance (30) • Model Function (60) • LEAP Leadership Resume (10) No semifinalists. No LEAP interview.

Architectural Design

Static Event

2018 Design Problem: http://www.tsaweb.org/Themes-and-Problems

OVERVIEW:	No change
ELIGIBILITY:	1 individual or team per chapter
TIME LIMITS	B. No semifinalists. No presentation/interview. C. No LEAP interview. No semifinalist presentation/interview.
LEAP LEADERSHIP RESUME/INTERVIEW:	LEAP Leadership Resume submitted with documentation at project check-in. No semifinalists. No LEAP interview.
ATTIRE:	See Page 6-7 of this guide for required dress code.
PROCEDURE:	C. No semifinalists. Winners are announced at Awards Ceremony. Delete D-E. No semifinalists. No presentation/interview.
REGULATIONS:	E. LEAP Leadership Resume submitted with documentation at project check-in. No semifinalists. No LEAP 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 student projects.***
EVALUATION:	Evaluation is based on 230 points: • Documentation (100) • Design Challenge (50) • Model (70) • LEAP Leadership Resume (10) No semifinalist presentation/interview.

Biomimicry

Static Event

2018 Topic: Environmental Protection

NOTE: this event is being offered at the state level only; it is NOT an official TSA competitive event. Follow the guidelines/procedures below to prepare for entry into the state competition.

OVERVIEW:	An increasing number of engineers and designers are looking to nature for inspiration in developing new products, systems and solutions to problems. Animals and plants have already come up with effective approaches to many of the same challenges humans face every day. Nature, after all, has gone through 3.8 billion years of research and development! Biomimicry is a new science that studies nature's best ideas, then imitates these designs to solve human problems. For this event, participants work as part of a team to research a given topic, identify a problem within that topic, and use biomimicry, or the example of an organism or system in nature, to solve the problem related to that topic. For example, if the topic were natural resource collection, students could apply the design of the shell of the namib desert beetle, which collects water directly out of the air, in the middle of the desert. The shell could be redesigned to collect water for desert communities with little access to water, or to anyone in need of fresh water. The team will create three (3) alternate solutions to solve the problem, choosing one (1) as their final solution. Each team will compile a portfolio, and create a poster board display. **The topic for 2018 is Environmental Protection.** The portfolio and display are submitted on conference day.
PURPOSE:	Participants apply the principles and practices of industrial design in developing and proposing a product inspired by nature.
ELIGIBILITY:	Participants are limited to two (2) teams of three to six (3-6) members per chapter; one (1) entry per team.
TIME LIMITS:	Entries must be started and completed during the current school year. Portfolio and display are submitted on conference day.
LEAP LEADERSHIP RESUME/INTERVIEW:	LEAP Leadership Resume submitted at project check-in. No LEAP interview.
ATTIRE:	See Page 6-7 of this guide for required dress code.

PROCEDURE:	A. Participants research and identify a problem within the designated topic. B. Using that problem, participants will find at least three (3) alternative solutions to that problem, inspired by nature. C. Participants select one of these solutions and explain why it is the best choice. D. Participants create a display of the final solution. A portfolio compiling all information will be submitted to the judges.
REGULATIONS:	A. Each team is required to secure the assistance of a biomimicry mentor; someone other than the TSA Advisor, who has experience related to the year's topic. The name, address, and occupation of this individual should be documented and included in the team's portfolio. B. Each team is encouraged to identify the demographics of the society where the problem exists. This information can be documented on the same page as the above and included in the team's portfolio. C. The entry will consist of a design portfolio and a poster board display. D. The solution (including design portfolio and display) must not exceed 3' wide x 4' high. The poster board display will include: 1. Name of the final solution, conference city, state and year. 2. Rationale for the final solution. 3. Detailed explanation of the final solution. 4. A three (3)-dimensional technical or CAD drawing and/or rendering of the final solution. E. Documentation materials (comprising "a portfolio") are required and should be secured in a clear front report cover. The report cover must include the following single-sided, 8 ½ " x 11" pages, in this order: 1. Title page with the event title, the conference city and state, and the year; one (1) page. 2. Table of contents; pages as needed. 3. Mentor verification that includes the name, address, and occupation of the mentor; one (1) page. 4. A design brief (format that follows) that describes the

design and its constraints; one (1) or more pages.

DESIGN BRIEF

Context: States the nature of the engineering design

Task: Clearly states what the team will be involved in

Restrictions: Identifies any restrictions

Investigations: Identifies the research involved

Development: States essential elements involved in planning

Production: Identifies the expected result

Evaluation: Identifies the expected assessment procedure and criteria

5. A description of the problem solving steps; pages as needed.
6. Plan of Work log that indicates preparation for the event, as noted by date, task, time involved, team member responsible and comments (see Plan of Work log in the National TSA Competitive Events Guide); one (1) page.
7. Evidence of research conducted by the design team; pages as needed.
8. Documentation of brainstorming; pages as needed.
9. Descriptions and illustrations of three (3) possible solutions with a brief but concise evaluation of the merits of each; three (3) or more pages.
10. A detailed description of the final solution; pages as needed.
11. A three (3)-dimensional technical or CAD drawing and/or rendering of the final solution; the maximum sheet size is drawing sheet cut size B - 11”x17”; when this sheet size is used, the sheet must be hole-punched and folded or placed in a sheet protector for insertion in the portfolio; pages as needed.
12. Math and science concepts and applications involved in the final design solution; one (1) page.
13. A list of references and resources; MLA style must be used in citing all references and resources; pages as needed.

	14. An evaluation of how well the final solution addresses the identified problem and an explanation of the impact of the solution on society; pages as needed. ***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:	Please see the rating form on the following pages. Evaluation is based on 100 points: • Documentation + LEAP Leadership Resume (60 points) • Display (40 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.***
STEM INTEGRATION:	This event aligns with the STEM educational standards noted below. Science, Technology, Engineering, Mathematics
PRIMARY LEADERSHIP SKILLS:	Leadership skills promoted in this event: • COMMUNICATION — Students choose an existing design problem and develop and explain their solution. Suggested leadership lessons: *Personality Types* and *Promote It* • CRITICAL THINKING — Students analyze and evaluate a problem in order to develop an acceptable solution. Suggested leadership lessons: *And The Answer Is* and *Critical Thinking Tips* • PROBLEM SOLVING — Students devise a plan that will yield an acceptable solution. Suggested leadership lessons: *Debate It* and *Effective Brainstorming* *Additional leadership skills promoted in this event: creative thinking, decision making, ethics, evaluation, organization, teamwork*
TSA AND CAREERS:	This competition connects to one or more of the career areas featured in the TSA AND CAREERS section of the National TSA Competitive Events Guide. Use *The 16 Career Clusters* chart and the *TSA Competitions and The 16 Career Clusters* grid as resources for information about careers.
CAREERS RELATED TO THIS EVENT:	All fields of engineering and design (and related areas)

Participant ID/Team ID# _____

BIOMIMICRY

2018 OFFICIAL RATING FORM **HIGH SCHOOL**

Record Scores in the Column Spaces Below

Documentation (60 points)

CRITERIA	Minimal performance 1-4 points	Adequate performance 5-8 points	Exemplary performance 9-10 points	
Evaluators: Using minimal (1-4 points), adequate (5-8 points) or exemplary (9-10 points) performance levels as a guideline, record the scores earned for the event criteria in the column spaces to the far right. The X1 or X2 notation in the criteria column is a multiplier factor for determining the points earned. (Example: an "adequate" score of 7 for an X1 criterion = 7 points; an "adequate" score of 7 for an X2 criterion = 14 points.)				
Portfolio components See Regulation C (X1)	The portfolio is unorganized and/or is missing three or more components.	The portfolio is missing two components, and/or it is loosely organized.	The portfolio has one or no components missing and is clearly well organized.	
Definition and explanation of problem and solution (X1)	The definition and explanation of the problem and/or the solutions to the problem are unclear; major grammatical errors are evident.	The definition and explanation of the problem, and/or the solutions to the problem are overgeneralized and/or not concise; some grammatical errors are present.	The definition and explanation of solutions to the problem are clear and concise, with few or no grammatical errors.	
Research base (X1)	The research is inadequate and/or very few credible sources are cited.	The research is conducted appropriately, with some credible sources cited.	There is a comprehensive research base with fully credible sources cited.	
Supporting graphics and materials (X1)	The graphics and supporting materials do not clarify the documentation, and/or they do not relate to the problem, and/or they may not be properly cited (MLA format).	The graphics and supporting materials are appropriate, properly cited (if needed), and supplement the documentation by providing clarity to the problem.	The graphics and supporting materials are of excellent quality; graphics clearly clarify abstract concepts and, if not original, are properly cited.	
Quality and effectiveness (X1)	The work is sloppy and disorganized, as if thrown together.	The work is mostly organized and of sufficient quality.	The work is well organized and of exceptional quality.	
LEAP Leadership Resume See Regulation I and instructions on TSA website (X1)	The team's efforts are not clearly communicated, lack detail, and/ or are unconvincing; few, if any, attempts are made to identify and/or incorporate the LEAP Be. Know. Do. criteria.	The team's efforts are adequately communicated, include some detail, are clear, and/or are generally convincing; identification and/or incorporation of the LEAP Be. Know. Do.criteria is adequate.	The team's efforts are clearly communicated, fully-detailed, and convincing; identification and/or incorporation of the LEAP Be.Know. Do. criteria is excellent.	
			SUBTOTAL (60 points)	

Display (40 points)

CRITERIA	Minimal performance 1-4 points	Adequate performance 5-8 points	Exemplary performance 9-10 points	
Communication of problem (X1)	The problem is difficult to understand as communicated and is presented in an illogical manner.	The problem is communicated, and thoughts are somewhat organized and/or concise.	The problem is communicated in an organized, clear, and concise manner.	
Communication of solution (X1)	The solution is difficult to understand as communicated and is presented in an illogical manner.	The solution is communicated, and thoughts are somewhat organized and/or concise.	The solution is communicated in an organized, clear, and concise manner.	
Creativity (X1)	The work lacks creativity, with little or no integration of design principles.	Some creative elements are included, and essential design principles and elements are used somewhat effectively.	The work exudes creativity, and essential design principles and elements are integrated.	
Aesthetics and Artisanship (X1)	The work is unorganized and sloppy, and the display seems to be an afterthought.	The work is organized, with essential design principles given in a logical format.	The work reflects an exemplary use of layout and design principles to logically communicate important data.	
			SUBTOTAL (40 points)	

Rules violations (a deduction of 20% of the total possible points) must be initialed by the evaluator, coordinator and manager of the event. Record the deduction in the space to the right.

Indicate the rule violated: _____

(To arrive at TOTAL score, add any subtotals and subtract rules violation points, as necessary. Check your math twice!)

TOTAL (100 points)

Comments:

I certify these results to be true and accurate to the best of my knowledge.

Evaluator

Printed name: _____ Signature: _____

Biotechnology Design

On-Site Event

2018 Area of Focus: "Food"

OVERVIEW:	No change
ELIGIBILITY:	A. 1 team or 1 individual per chapter. B. No semifinalists. All teams give presentation/interview.
TIME LIMITS:	B. No semifinalists. All teams will give a presentation up to 5 minutes in length. The presentation/interview is given by two (2) members of the team. C. No semifinalists. No LEAP interview.
LEAP LEADERSHIP RESUME/INTERVIEW:	No semifinalists. No LEAP interview. LEAP Leadership Resume submitted at event check-in.
ATTIRE:	See Page 6-7 of this guide for required dress code.
PROCEDURE:	C. No semifinalists. All teams give multimedia presentation. Winners announced at Awards Ceremony. D. No semifinalists. All teams give multimedia presentation. Two (2) representatives from each team report to event area at the time posted for their multimedia presentation. E. No semifinalists. Two (2) team representatives give the presentation and answer questions. Up to five (5) minutes will be provided for the presentation. No LEAP interview.
REGULATIONS:	E. No semifinalists. All teams give multimedia presentation. Each team must send two (2) representatives to participate in the presentation/interview, which is not to exceed five (5) minutes. F. No semifinalists. All teams give a presentation. A computer for the multimedia presentation will be provided by NJ TSA. Teams must bring their presentation on a removable device such as CD, DVD, or USB drive. G. No semifinalists. No LEAP 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 student projects.***
EVALUATION:	Evaluation is based on 180 points: • Documentation (50)

	• Display (40) • Presentation/interview (80) • LEAP Leadership resume (10) No semifinalists. All teams give presentation. No LEAP interview.

Chapter Team

On-Site Event

OVERVIEW:	No semifinals. All teams make the oral presentation.
ELIGIBILITY:	2 teams of six (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. Time-related penalties apply. No LEAP interview. Delete C.
LEAP LEADERSHIP RESUME/INTERVIEW:	No semifinalists. No LEAP interview. LEAP Leadership Resume submitted at event check-in.
ATTIRE:	Participants may wear **Official TSA Attire OR Business-Like Attire**, as described on Page 6-7 of this guide.
PROCEDURE:	C-D. All teams make the oral presentation. Delete F.
REGULATIONS:	A. No semifinalists. All teams participate in the oral presentation. C. No semifinalists. All teams participate in the oral presentation. F. Replace “any semifinalist team” with “any team.” I. No semifinalists. All teams participate in the oral presentation. K. No LEAP interview. N. No semifinalists. No LEAP interview. LEAP Leadership Resume submitted at event check-in.
EVALUATION:	Evaluation is based on 230 points: • Team written test (10) • Demonstration (190) • Possible bonus points for additional motions/actions (20) • LEAP Leadership Resume (10) No semifinalists. All teams do written and oral portion of event. No LEAP interview.

Children's Stories

On-Site Event (with Pre-Conference component)

2018 Theme: Electronically Enhanced Book – Participants are to design an electronically enhanced book in which the electronics enrich the storybook experience.

OVERVIEW:	No change Note: **Portfolio, Storybook and LEAP Leadership Resume submitted Pre-Conference.** Teams participate in the reading and interview on conference day.
ELIGIBILITY:	1 team or 1 individual per chapter.
TIME LIMITS:	No change
LEAP LEADERSHIP RESUME/INTERVIEW:	No semifinalists. No LEAP interview. LEAP Leadership Resume submitted Pre-Conference.
ATTIRE:	See Page 6-7 of this guide for required dress code.
PROCEDURE:	D. Storybook, portfolio and LEAP Leadership Resume submitted Pre-Conference. E-G. No semifinalists. All teams will participate in the reading and interview on conference day. No LEAP interview. I. No finalists. 1st, 2nd and 3rd place winners announced at Awards Ceremony.
REGULATIONS:	I. No semifinalists. All teams will participate in the reading and interview. K. No semifinalists. No LEAP interview. LEAP Leadership Resume submitted Pre-Conference. ***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 190 points: • Documentation portfolio (50) • Storybook (100) • Reading and interview (30) • LEAP Leadership Resume (10) No semifinalists. All teams participate in reading/interview. No LEAP interview.

Coding

On-Site Event

OVERVIEW:	No change. Participants solve a problem On Site and **must bring their own computer hardware and software.**
ELIGIBILITY:	2 teams of 1-3 members per chapter (a team can be made up of 1 member).
TIME LIMITS:	No semifinalists. No LEAP interview. Teams have two (2) hours to design and construct solution to On Site problem.
LEAP LEADERSHIP RESUME/INTERVIEW:	LEAP Leadership Resume submitted at check-in. No semifinalists. No LEAP interview.
ATTIRE	See Page 6-7 of this guide for required dress code.
PROCEDURE:	F-H. No semifinalists. No LEAP interview. **Teams must bring their own computer hardware and software.**
REGULATIONS:	F. LEAP Leadership Resume submitted at check-in. No semifinalists. No LEAP 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 student projects.***
EVALUATION:	Evaluation is based on 90 points: • Solution (30) • Testing of Solution (50) • LEAP Leadership Resume (10) No semifinalists. No LEAP interview.

Computer-Aided Design (CAD), Architecture

Pre-Conference Event

2018 Design Problem will be posted on the NJ TSA website on January 15, 2018

OVERVIEW:	No change Design problem will be posted on the NJ TSA website on January 15, 2018.
ELIGIBILITY:	1 individual per chapter
TIME LIMITS:	Delete A-D. Entries must be completed during the school year and are submitted Pre-Conference. There is no on-site component. No LEAP interview. Design problem will be posted on the NJ TSA website on January 15, 2018.
LEAP LEADERSHIP RESUME/INTERVIEW:	LEAP Leadership Resume submitted Pre-Conference. No semifinalists. No LEAP interview.
ATTIRE	See Page 6-7 of this guide for required dress code.
PROCEDURE:	Delete A-K. Entries are submitted Pre-Conference. LEAP Leadership Resume submitted Pre-Conference. No on-site component. No semifinalists. No LEAP interview. Entries are picked up at the time and place stated in the conference program.
REGULATIONS:	Delete A-D. Delete F-G. H. LEAP Leadership Resume submitted Pre-Conference. No semifinalists. No LEAP interview. 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 screen.” Evaluation is based on 150 points: • Solution (40) • Layout (60) • Architectural application (20) • Software utilization (20) • LEAP Leadership Resume (10)

Computer-Aided Design (CAD), Engineering

Pre-Conference Event

2018 Design Problem will be posted on the NJ TSA website on January 15, 2018

OVERVIEW:	No change This design problem will be posted on the NJ TSA website on January 15, 2018.
ELIGIBILITY:	1 individual per chapter
TIME LIMITS:	Delete A-D. Entries must be completed during the school year and are submitted Pre-Conference. There is no on-site component. No LEAP interview. Design problem will be posted on the NJ TSA website on January 15, 2018.
LEAP LEADERSHIP RESUME/INTERVIEW:	LEAP Leadership Resume submitted Pre-Conference. No semifinalists. No LEAP interview.
ATTIRE	See Page 6-7 of this guide for required dress code.
PROCEDURE:	Delete A-K. Entries are submitted Pre-Conference. LEAP Leadership Resume submitted Pre-Conference. No on-site component. No semifinalists. No LEAP interview. Entries are picked up at the time and place stated in the conference program.
REGULATIONS:	Delete A-D. Delete F-G. H. LEAP Leadership Resume submitted Pre-Conference. No semifinalists. No LEAP interview. 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 screen.” Evaluation is based on 150 points: • Solution (40) • Layout (60) • Engineering application (20) • Software utilization (20) • LEAP Leadership Resume (10)

Computer Integrated Manufacturing (CIM)

On-Site Event

OVERVIEW:	No semifinalists. All teams assemble their entry and give live sales pitch. Note: Promotional product must be made up of **multiple pieces**.
ELIGIBILITY:	2 teams of 2 members per chapter.
TIME LIMITS:	B. No semifinalists. All teams assemble their promotional product. E. No semifinalists. No LEAP interview.
LEAP LEADERSHIP RESUME/INTERVIEW:	No semifinalists. No LEAP interview. LEAP Leadership Resume submitted at event check-in.
ATTIRE:	See Page 6-7 of this guide for required dress code.
PROCEDURE:	B-C. No semifinalists. All teams participate in assembly session. L. No semifinalists. No LEAP interview.
REGULATIONS:	C-E. No semifinalists. All teams participate in assembly and sales pitch session. F. No semifinalists. No LEAP interview. LEAP Leadership Resume submitted at event check-in. ***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 210 points: • Documentation (100) • Component Analysis (40) • Assembly and Sales Pitch/Demonstration (60) • LEAP Leadership Resume (10) No semifinalists. No LEAP interview.

Debating Technological Issues

On-Site Event

2018 Topic: Information Security in Modern Life

Subtopic 1: Resolved: Genetic Discovery Companies (such as 23 and me) should be able to sell or make available your genetic profile to third parties.

Subtopic 2: Resolved: Companies should be able to sell your usage data (history, bookmarks, application downloads, etc) of their equipment to third parties.

Subtopic 3: Resolved: Radio Frequency Identification (RFID) and Global Positioning Systems (GPS) should be used on student badges to take attendance and track students' movements around school campuses.

OVERVIEW:	No change
ELIGIBILITY:	1 team of 2 members per chapter
TIME LIMITS:	C. No semifinalists. No LEAP interview
LEAP LEADERSHIP RESUME/INTERVIEW:	No semifinalists. No LEAP interview. LEAP Leadership Resume submitted at event check-in.
ATTIRE:	See Page 6-7 of this guide for required dress code.
PROCEDURE:	B. No semifinals. Delete Q-R. S. No semifinalists. No LEAP interview. T. No finalists. 1st, 2nd and 3rd place announced at Awards Ceremony.
REGULATIONS:	I. No observers allowed in debate room. No semifinalists. L. No semifinalists. No LEAP interview. LEAP Leadership Resume submitted at event check-in.
EVALUATION:	Evaluation is based on 100 points: • Debate (90) • LEAP Leadership Resume (10) No semifinalists. No LEAP interview.

Digital Video Production

Pre-Conference Event

2018 Theme: TSA Competitive Event Infomercial

OVERVIEW:	No change **Note:** NJ TSA reserves the right to eliminate any entries that contain inappropriate content. These entries will not be judged.
ELIGIBILITY:	1 team or individual per chapter
TIME LIMITS:	D. No semifinalists. No LEAP interview.
LEAP LEADERSHIP RESUME/INTERVIEW:	No semifinalists. No LEAP interview. LEAP Leadership Resume submitted at project check-in.
ATTIRE:	See Page 6-7 of this guide for required dress code.
PROCEDURE:	A. Entries and LEAP Leadership Resume submitted Pre-Conference. C-E. No semifinalists. No LEAP interview. F. 1st, 2nd and 3rd place winners are announced at Awards Ceremony.
REGULATIONS:	D. Entries are picked up by participants at the time and place stated in the conference program. I. No semifinalists. No LEAP interview. LEAP Leadership Resume submitted at project check-in. ***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 110 points • Documentation (30) • Video production (70) • LEAP Leadership Resume (10) No semifinalists. No LEAP interview.

Dragster Design

Pre-Conference Event

OVERVIEW:	No change
ELIGIBILITY:	2 individuals per chapter
TIME LIMITS:	**B. Dragster, drawing and LEAP Leadership Resume submitted Pre-Conference.** **Delete C. No interview. No LEAP interview.** **Cars that do not meet specifications will NOT be raced.**
LEAP LEADERSHIP RESUME/INTERVIEW:	No semifinalists. No LEAP interview. LEAP Leadership Resume submitted at project check-in.
ATTIRE:	See Page 6-7 of this guide for required dress code.
PROCEDURE:	A. Dragster, drawing and LEAP Leadership Resume are submitted Pre-Conference. Delete F. No interview. No LEAP interview.
REGULATIONS:	F. No semifinalists. No LEAP interview. LEAP Leadership Resume submitted at project check-in. PLEASE NOTE: • **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 the competition.** • **A caliper will be used for all measurements** ***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.

EVALUATION:	Evaluation is based on 115 points: • Dragster construction (50) • LEAP Leadership Resume (10) • Race (55) No car builder interview. No LEAP interview.

Engineering Design

On-Site Event

2018 Theme: Engineer the Tools of Scientific Discovery

OVERVIEW:	No semifinalists. All teams give a presentation/interview.
ELIGIBILITY:	1 team of 3-6 members per chapter. No semifinalists. All teams participate in presentation/interview.
TIME LIMITS:	B. No semifinalists. All teams will give a presentation of up to 5 minutes in length. C. No semifinalists. No LEAP interview.
LEAP LEADERSHIP RESUME/INTERVIEW:	No semifinalists. No LEAP interview. LEAP Leadership Resume submitted at event check-in.
ATTIRE:	See Page 6-7 of this guide for required dress code.
PROCEDURE:	C-D. No semifinalists. All teams will give a presentation of up to 5 minutes in length at the time designated by the event coordinator at check-in. E. No semifinalists. No LEAP interview. LEAP Leadership Resume submitted at event check-in.
REGULATIONS:	J. No semifinalists. All teams provide three (3) members to give presentation/interview. K. No semifinalists. All teams give presentation/interview up to five (5) minutes in length. M. No semifinalists. No LEAP interview. LEAP Leadership Resume submitted at event check-in. ***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 210 points: • Portfolio (100) • Display (50) • Presentation/interview (50) • LEAP Leadership Resume (10) No semifinalists. All teams participate in presentation/interview. No LEAP interview.

Essays on Technology

On-Site Event

OVERVIEW:	No change
ELIGIBILITY:	2 individuals per chapter
TIME LIMITS:	B. No semifinalists. No LEAP interview.
LEAP LEADERSHIP RESUME/INTERVIEW:	No semifinalists. No LEAP interview. LEAP Leadership Resume submitted at event check-in.
ATTIRE:	See Page 6-7 of this guide for required dress code.
PROCEDURE:	C. Computers will be provided by NJ TSA. D. No USB flash drive needed. Directions for submission of essays to judges will be provided on-site. I-K. No semifinalists. No LEAP interview. L. No finalists. 1st. 2nd and 3rd place winners announced at Awards Ceremony.
REGULATIONS:	B-C. Computers will be provided by NJ TSA. I. All essays become the property of NJ TSA. J. No semifinalists. No LEAP interview. LEAP Leadership Resume submitted at event check-in.
EVALUATION:	Evaluation is based on 110 points: • Essay (100) • LEAP Leadership Resume (10) No semifinalists. No LEAP interview.

Extemporaneous Speech

On-Site Event

OVERVIEW:	No change
ELIGIBILITY:	1 individual per chapter
TIME LIMITS:	Delete C. No semifinalists. No LEAP interview.
LEAP LEADERSHIP RESUME/INTERVIEW:	No semifinalists. No LEAP interview. LEAP Leadership Resume submitted at event check-in.
ATTIRE:	See Page 6-7 of this guide for required dress code.
PROCEDURE:	Delete H-K. No semifinalists. No LEAP interview.
REGULATIONS:	E. No observers will be permitted. No semifinalist round. G. No semifinalists. No LEAP interview. LEAP Leadership Resume submitted at event check-in.
EVALUATION:	Evaluation is based on 90 points: • Speech (80) • LEAP Leadership Resume (10) No semifinalists. No LEAP interview.

Fashion Design and Technology

On-Site Event (with Pre-Conference Component)

2018 Theme: 1980's Fashion - Trends and Styles

Each team should design and create from scratch three (3) garments that represent one (1) of the 1980's era fashion trends.

OVERVIEW:	Portfolio, patterns and prototypes are submitted **Pre-Conference.** No semifinalists. **All teams participate in on-site presentation/interview on conference day.**
ELIGIBILITY:	2 teams of 2-4 members per chapter
TIME LIMITS:	B. No semifinalists. All teams participate in presentation/interview. Delete C. No semifinalists. No LEAP interview.
LEAP LEADERSHIP RESUME/INTERVIEW:	No semifinalists. No LEAP interview. LEAP Leadership Resume submitted at project check-in.
ATTIRE:	See Page 6-7 of this guide for required dress code.
PROCEDURE:	A-B. Entries are submitted Pre-Conference (please see Page 5 of this guide for submission information). No semifinalists. All teams participate in on-site presentation/interview on conference day. C. No semifinalists. All teams sign up for times for their presentation/interview. These sessions are OPEN to audience members. D-F. No semifinalists. All teams participate in presentation/interview. Winners announced at Awards Ceremony. I. No semifinalists. All teams participate in presentation/interview. J. No semifinalists. No LEAP interview. LEAP Leadership Resume submitted at project check-in.
REGULATIONS:	F. No semifinalists. All teams participate in presentation/interview. G. No semifinalists. No LEAP interview. LEAP Leadership Resume submitted at project check-in. ***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.*** Labels/tape are recommended for labeling garments, documentation, and on the outside of submission container and/or garment bag.

EVALUATION:	Evaluation is based on 230 points: • Portfolio (100) • Patterns (30) • Quality of garments (30) • Presentation/interview (60) • LEAP Leadership Resume (10) No semifinalists or top ten finalists. 1st, 2nd and 3rd place winners announced at Awards Ceremony. All teams do presentation/interview. No LEAP interview.

Flight Endurance

On-Site Event

OVERVIEW:	No change Plane, portfolio, LEAP Leadership Resume, and flight box are built off-site and submitted for judging on conference day.
ELIGIBILITY:	1 individual per chapter
TIME LIMITS:	B. Participants are provided a minimum of 20 minutes for trim flights at the event site. Delete C. No semifinalists. No LEAP interview.
LEAP LEADERSHIP RESUME/INTERVIEW:	No semifinalists. No LEAP interview. LEAP Leadership Resume submitted at event check-in.
ATTIRE:	See Page 6-7 of this guide for required dress code.
PROCEDURE:	K. No semifinalists. 1st, 2nd and 3rd place winners announced at Awards Ceremony. Delete M-O. No semifinalists. No LEAP interview. Participants pick-up planes at time/location specified by event coordinator.
REGULATIONS:	G. No semifinalists. No LEAP interview. LEAP Leadership Resume submitted at event check-in. PLEASE NOTE: B. **Plane must be contained in a flight box, which students must provide.** ***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 plane. It is recommend ID#'s are placed on bottom or back side of plane with tape or label.
EVALUATION:	Evaluation is based on: • Documentation (70) • LEAP Leadership Resume (10) • Flight scores (points to be determined) No semifinalists. No LEAP interview.

Future Technology Teacher

On-Site Event (with Pre-Conference component)

OVERVIEW:	No change Note: **Portfolio submitted Pre-Conference.**
ELIGIBILITY:	3 individuals per chapter
TIME LIMITS:	B. No semifinalists. All participants make presentation on site. F. No semifinalists. No LEAP interview. LEAP Leadership Resume submitted at project check-in.
LEAP LEADERSHIP RESUME/INTERVIEW:	No semifinalists. No LEAP interview. LEAP Leadership Resume submitted at project check-in.
ATTIRE:	See Page 6-7 of this guide for required dress code.
PROCEDURE:	F. Portfolio and LEAP Leadership Resume submitted Pre-Conference. G-H. No semifinalists. All participants present lesson plan/activity. K. No semifinalists. No LEAP interview.
REGULATIONS:	G. Computer/projector will be provided by NJ TSA. K. No semifinalists. No LEAP interview. LEAP Leadership Resume submitted at project check-in. ***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 170 points: • Documentation (70) • Presentation of lesson (80) • LEAP Leadership Resume (10) • Possible bonus points for audio/visuals (10) No semifinalists. All participants make presentation. No LEAP interview. **Additional Bonus Points:** An additional 10 points is also possible for participants who include a completed application for the *NJ TSA Future Technology Teacher Scholarship* in their Portfolio.

	Note—you do not need to be a senior to include the completed scholarship application in your Portfolio and receive bonus points. Seniors, however, are encouraged to officially apply for the scholarship through the NJ TSA office. Please visit the NJ TSA website for application requirements.

Music Production

Pre-Conference Event

OVERVIEW:	No change
ELIGIBILITY:	1 team or individual per chapter.
TIME LIMITS:	D. No semifinalists. No interview. Entries submitted Pre-Conference. E. No semifinalists. No LEAP interview. LEAP Leadership Resume submitted at project check-in.
LEAP LEADERSHIP RESUME/INTERVIEW:	No semifinalists. No LEAP interview. LEAP Leadership Resume submitted at project check-in.
ATTIRE:	See Page 6-7 of this guide for required dress code.
PROCEDURE:	A. Entries submitted Pre-Conference. Delete C-E. No semifinalists. No interview. No LEAP interview.
REGULATIONS:	E. Entries are picked up by participants at the time and place stated in the conference program. K. No semifinalists. No LEAP interview. LEAP Leadership Resume submitted at project check-in. ***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.*** ID#'s should be labeled on CD, CD case (if included) and portfolio.
EVALUATION:	Evaluation is based on 110 points: • Documentation (40) • Musical Piece (60) • LEAP Leadership Resume (10) No semifinalists. No interview. No LEAP interview.

On Demand Video

Pre-Conference Event

2018 Theme will be posted on the NJ TSA website at 5pm on March 1, 2018

OVERVIEW:	The theme and any required criteria will be announced on the NJ TSA website at 5pm on March 1, 2018. Participants will write, shoot and edit a sixty (60) second video. The video, documentation and LEAP Leadership Resume must be **submitted by 5pm on March 6, 2018.** Entries will be judged and put on display at the State Conference.
ELIGIBILITY:	1 team of 2-6 members per chapter.
TIME LIMITS	Delete A, C. Theme will be posted on the NJ TSA website at 5pm on March 1, 2018. Entries must be received at the NJ TSA Office or postmarked by 5pm on March 6, 2018. D. No semifinalists. No LEAP interview.
LEAP LEADERSHIP RESUME/INTEVIEW	No semifinalists. No LEAP interview. LEAP Leadership Resume submitted with video and documentation.
ATTIRE:	See Page 6-7 of this guide for required dress code.
PROCEDURE:	A. Video, documentation and LEAP Leadership Resume submitted Pre-Conference by 5pm on March 6, 2018. B. LEAP Leadership Resume submitted with video and documentation by 5pm on March 6, 2018. C. Theme will be posted on the NJ-TSA website on March 1, 2018. F. Delete F. G-I. No semifinalists. No LEAP interview. J. 1st, 2nd and 3rd place winners announced at Awards Ceremony.
REGULATIONS:	B. Entries are picked up by participants at the time and place stated in the conference program. I. No semifinalists. No LEAP interview. LEAP Leadership Resume submitted with video and documentation. ***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 140 points: • Documentation portfolio (30) • Production (100) • LEAP Leadership Resume (10) No semifinalists. No LEAP interview.

Optical Engineering

Static Event

2018 Design Problem will be posted on the NJ TSA website on January 15, 2018

NOTE: this event is being offered at the state level only; it is NOT an official TSA competitive event. Follow the guidelines/procedures below to prepare for entry into the state competition.

OVERVIEW:	Participants work as part of a team to design and fabricate an optical device that will meet a specific need. The focus will be on the design process; participants should incorporate innovation into their entry/solution. Through use of a model/prototype, display, and portfolio, participants document and justify their approach and reasoning in identifying a problem and their solution's direct impact in their community. Participants justify and demonstrate their solution in a timed presentation.
PURPOSE:	Participants apply the principles and practices of engineering and universal design to develop an effective and practical solution to a specific design problem that they have identified. The solution incorporates the application of optical and mathematical principles and concepts; demonstrates the application of technology; and assesses the impact of the solution.
ELIGIBILITY:	Participants are limited to three (3) teams of three to six (3-6) members per chapter; one (1) entry per team.
TIME LIMITS:	Entries must be started and completed during the current school year. Portfolio, display and LEAP Leadership Resume are submitted on conference day.
LEAP LEADERSHIP RESUME/INTERVIEW:	LEAP Leadership Resume submitted at project check-in. No LEAP interview.
ATTIRE:	See Page 6-7 of this guide for required dress code.
PROCEDURE:	A. Participants submit their entries on conference day. No more than two (2) team members set up the display. B. Entries are reviewed by a panel of Edmund Optics Engineers. Neither students nor advisors are present at this time. C. No more than two (2) team members pick up their entry from the display area at the time specified by the event coordinator.
REGULATIONS:	A. The model prototype must not exceed 2' deep x 3' wide x 4' high. B. Documentation materials, comprising a portfolio, are required and should be secured in a clear front report cover. The portfolio must include the following single-sided, 8 1⁄2" x 11" pages, in this order: I. Title page with the event title, the conference city and state, and the year

	II. Table of contents III. A design brief (format that follows) that describes the design and its constraints. i. **Context:** States the nature of the engineering design ii. **Task:** Clearly states what the team will be involved in iii. **Restrictions:** Identifies any restrictions iv. **Investigations:** Identifies the research involved v. **Development:** States essential elements involved in planning vi. **Production:** Identifies the expected result vii. **Evaluation:** Identifies the expected assessment procedure and criteria IV. A description of the problem solving steps V. Plan of Work log that indicates preparation, as noted by date, task, time involved, team member responsible and comments (see Plan of Work log) VI. Evidence of research conducted by the design team VII. Documentation of brainstorming; pages as needed VIII. Descriptions and illustrations of a minimum of three (3) possible solutions with a brief, but concise, evaluation of the merits of each IX. A detailed description of the final solution, including an explanation of the steps of operation X. A three (3)-dimensional technical or CAD drawing and/or rendering of the final solution; the maximum sheet size is drawing sheet cut size B—11" x 17"; when this sheet size is used, the sheet must be hole-punched and folded or placed in a sheet protector for insertion in the portfolio XI. Math and science concepts and applications involved in the final design solution XII. Explanation of the areas of technology that are an integral part of the solution, including as many as apply i. Optics ii. Manufacturing iii. Construction iv. Medical technology v. Transportation vi. Energy and power vii. Information and communication XIII. A list of references and resources; MLA style must be used XIV. A bill of materials for all materials used for the model prototype and their cost (bonus points will be given for budget efficiency; see official rating form). *Using pre-manufactured optic devices for the model prototype is prohibited XV. An evaluation of how well the final solution addresses the identified problem and an explanation of the impact of the solution on animal shelters

	C. Any special set-up and/or equipment required for the display or presentation is the responsibility of the participants. Battery powered prototypes are acceptable. Dry cell only. ***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 330 points: • Documentation (150) • Display (40) • Model/Prototype (80) • LEAP Leadership Resume (10 points) • Possible bonus points for budget efficiency (50) Please see the rating form on the following pages.
STEM INTEGRATION:	This event aligns with the STEM educational standards noted below. Science, Technology, Engineering, Mathematics
PRIMARY LEADERSHIP SKILLS:	Leadership skills promoted in this event: • COMMUNICATION — Students choose an existing design problem and develop and explain their solution. Suggested leadership lessons: *Personality Types* and *Promote It* • CRITICAL THINKING — Students analyze and evaluate a problem in order to develop an acceptable solution. Suggested leadership lessons: *And The Answer Is* and *Critical Thinking Tips* • PROBLEM SOLVING — Students devise a plan that will yield an acceptable solution. Suggested leadership lessons: *Debate It* and *Effective Brainstorming* *Additional leadership skills promoted in this event: creative thinking, decision making, ethics, evaluation, organization, teamwork*
TSA AND CAREERS:	This competition connects to one or more of the career areas featured in the TSA AND CAREERS section of the National TSA Competitive Events Guide. Use *The 16 Career Clusters* chart and the *TSA Competitions and The 16 Career Clusters* grid as resources for information about careers.
CAREERS RELATED TO THIS EVENT:	Optical engineer Mechanical engineer Manufacturing consultant Mathematician CAD Technician

Participant ID/Team ID# _____

OPTICAL ENGINEERING

2018 OFFICIAL RATING FORM **HIGH SCHOOL**

Documentation (150 Points)

CRITERIA	Minimal performance 1-4 points	Adequate Performance 5-8 points	Exemplary Performance 9-10	Record the scores in the column spaces below.
Evaluators: Using minimal (1-4 points), adequate (5-8 points) or exemplary (9-10 points) performance levels as a guideline, record the scores earned for the event criteria in the column spaces to the far right. The X1, X2 or X3 notation in the criteria column is a multiplier factor for determining the points earned. (Example: an "adequate" score of 7 for an X1 criterion = 7 points; an "adequate" score of 7 for an X2 criterion = 14 points; an "adequate" score of 7 for an X3 criterion = 21 points.)				
Documentation (160 Points)				
Portfolio components See Regulation C (X1)	The portfolio is unorganized and missing many of the required sections and necessary materials.	The portfolio is somewhat organized and missing only a few required sections and materials.	The portfolio is completely organized and has all of the designated sections and materials included.	
Design brief (X2)	The proper design brief format is not used, and key elements of the process are missing.	The design brief format is followed, and most elements of process are included.	The design brief format is followed, and all elements of the process are stated completely and effectively.	
Problem solving steps (X1)	There is little attempt to describe and document the problem- solving steps.	The problem-solving steps are listed, with adequate descriptions of the process.	Problem-solving steps are listed, with complete and effective descriptions for each.	
Plan of Work log (X1)	The Plan of Work log is missing key elements.	The Plan of Work log includes most key elements.	The Plan of Work log effectively documents all key elements.	
Research (X1)	There is little evidence of documentation of the necessary research.	There is some evidence of documentation of the necessary research.	There is exemplary evidence of documentation of the necessary research.	
Brainstorming (X1)	There is little documentation of brainstorming.	There are somewhat adequate examples of brainstorming efforts.	There are detailed and effective examples of brainstorming activities.	
Possible solutions (X1)	Only one possible solution is presented, with a weak description.	Two or more possible solutions are presented, with adequate descriptions.	Three or more possible solutions are presented, with detailed and effective descriptions.	
Final solution (X1)	Only a very brief explanation of the final solution is presented, and it does not include an explanation of the steps of operation.	A clear explanation of the final solution is presented, with an adequate explanation of the steps of operation.	A clear and concise explanation of the solution is offered, and it includes an explanation of the necessary steps of operation.	
Technical drawing (X1)	Drawings are not presented in the proper technical format, and/or they are of poor quality and missing key elements and notations.	Drawings are presented in the proper format and adequately represent the final solution.	Drawings are presented in the proper format, and they effectively represent the final solution.	
Math and science concepts (X1)	There is little evidence of the use of math and science concepts and/or applications, and/or they are poorly described.	Some math and science concepts and applications are included but they are only adequately described.	There are clear and concise descriptions of the math and science concepts and applications that were used.	
Technology areas (X1)	There is little explanation of the areas of technology that are applied to the solution, and/or they are poorly described.	An adequate explanation of at least two areas of technology are included.	There is a complete and detailed explanation of three or more areas of technology used and applied in the solution.	

References/resources (X1)	There is little evidence of documentation of references and resources in the format required.	Several resources and references are documented in the format required.	Many notable examples of resources and references are documented; the required format is used.	
Evaluation/impact (X2)	There is little attempt to evaluate the final design and its impact.	There is an adequate attempt to document the final design and its impact.	There is a clear and effective evaluation of the final design and its impact.	
LEAP Leadership Resume See Regulation I and instructions on TSA website (X1)	The team's efforts are not clearly communicated, lack detail, and/ or are unconvincing; few, if any, attempts are made to identify and/or incorporate the LEAP Be. Know. Do. criteria.	The team's efforts are adequately communicated, include some detail, are clear, and/or are generally convincing; identification and/or incorporation of the LEAP Be. Know. Do.criteria is adequate.	The team's efforts are clearly communicated, fully-detailed, and convincing; identification and/or incorporation of the LEAP Be.Know. Do. criteria is excellent.	
			Subtotal 160	
Display (40 Points)				
Presentation of design (X2)	The design presentation is weak and ineffective.	The design presentation is somewhat effective.	The design presentation is clear, concise, and effective.	
Appearance and impact (X2)	The appearance of the display is poor and has very little or no visual impact.	The display is somewhat neat in appearance, with some visual impact.	The display is exemplary in appearance and provides a strong and effective visual impact.	
			Subtotal 40	
Model/Prototype (80 Points)				
Marketability and usefullness (X2)	There is little evidence of the design's marketability and usefulness.	There is some evidence of the marketability and/or usefulness of the design.	There is strong evidence of both the marketability and the usefulness of the design.	
Effectiveness of design (X3)	There is little evidence of an effective design.	There is some evidence of an effective design.	There is clear evidence of an effective and exemplary design.	
Creativity and innovation (X2)	The design lacks creativity and innovation.	There is some evidence of a creative and innovative design.	The design clearly reflects exemplary creativity and innovation.	
Appearance and quality (X1)	The appearance and quality of the construction of the device are poor.	The appearance of the device and the quality of construction are adequate.	The device exemplifies excellence in appearance and quality of design.	
			Subtotal 80	
Bonus Points for Budget Efficiency (50 Points Possible)				
\$50 and under = 20 points \$50.01 to \$60 = 15 points \$60.01 to \$70 = 10 points \$70.01 to \$80 = 5 points Over \$80, or failure to list all components = 0 points				
			Subtotal (50)	
Rules violations (a deduction of 20% of the total possible points) must be initialed by the evaluator, coordinator, and manager of the event. Record the deduction in the space to the far right. Indicate the rule violated: _____				
To arrive at TOTAL score, add any subtotals and subtract rules violation points, as necessary. **TOTAL (330 points)**				
Comments:				
I certify these results to be true and accurate to the best of my knowledge. Evaluator Printed Name: _____ Signature: _____				

Photographic Technology

Pre-Conference Event

2018 Theme: The Battle Between Nature and Technology - Who Wins?

OVERVIEW:	No semifinalists. No on-site problem. Entries submitted Pre-Conference.
ELIGIBILITY:	1 individual per chapter
TIME LIMITS:	No change
LEAP LEADERSHIP RESUME/INTERVIEW:	LEAP Leadership Resume submitted Pre-Conference on USB drive with images and documentation. No semifinalists. No LEAP interview.
ATTIRE:	See Page 6-7 of this guide for required dress code.
PROCEDURE:	A. Entries and LEAP resume are submitted Pre-Conference on USB drive. B. No semifinalists. Delete C – L. No semifinalists. No on-site portion. Entries submitted Pre-Conference. M. No semifinalists. No LEAP interview.
REGULATIONS:	A. Images, documentation and LEAP resume submitted Pre-Conference. K. LEAP Leadership Resume submitted Pre-Conference on USB drive with images and documentation. No semifinalists. No LEAP interview. Please read Regulations carefully, paying close attention to size requirements, order of pages, etc. ***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.*** ID#'s should be labeled on USB drives and on all documentation.
EVALUATION:	Evaluation is based on 60 points: • Documentation portfolio (50) • LEAP resume (10). No semifinalists. No on-site component. No LEAP interview.

Prepared Presentation

On-Site Event

2018 topic will be posted on the NJ TSA website on April 11, 2018

OVERVIEW:	No change
ELIGIBILITY:	1 individual per chapter
TIME LIMITS:	F. No semifinalists. No LEAP interview.
LEAP LEADERSHIP RESUME/INTERVIEW:	LEAP Leadership Resume submitted at event check-in. No semifinalists. No LEAP interview.
ATTIRE:	See Page 6-7 of this guide for required dress code.
PROCEDURE:	B. The assigned topic will be posted on the NJ TSA website on April 11, 2018. D. NJ TSA will provide a computer, projector and screen. All files must be on a USB drive or CD/DVD. E. No observers will be permitted. Delete F-H. No semifinalists. 1st, 2nd and 3rd place winners announced at Awards Ceremony. I. No semifinalists. No LEAP interview.
REGULATIONS:	B. Topic will be posted on the NJ TSA website on April 11, 2018. F. NJ TSA will provide a computer, projector and screen. All files must be on a USB drive or CD/DVD. G. NJ TSA will provide the table. I. NJ TSA will provide a computer, projector and screen. All files must be on a USB drive or CD/DVD. J. LEAP Leadership Resume submitted at event check-in. No semifinalists. No LEAP interview.
EVALUATION:	Evaluation is based on 110 points: • Content (30) • Stage presence (30) • Organization (40) • LEAP Leadership Resume (10) No semifinalists. No LEAP interview.

Promotional Design

Pre-Conference Event

OVERVIEW:	No semifinalists. No on-site problem. Entries submitted Pre-Conference.
ELIGIBILITY:	2 individuals per chapter
TIME LIMITS:	Delete B. No semifinalists. No on-site portion of the event. Delete C. No semifinalists. No LEAP interview.
LEAP LEADERSHIP RESUME/INTERVIEW:	No semifinalists. No LEAP interview. LEAP Leadership Resume submitted at event check-in.
ATTIRE:	See Page 6-7 of this guide for required dress code.
PROCEDURE:	A. Entries and LEAP Leadership Resume submitted Pre-Conference. Delete C-G. No semifinalists. No on-site component. No LEAP interview. H. Winning entries become the property of NJ TSA.
REGULATIONS:	Delete B-C. No semifinalists. No on-site component. No LEAP interview. LEAP Leadership Resume submitted Pre-Conference. ***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 120 points: • Folder cover (40) • Folder contents (70) • LEAP Leadership Resume (10) No semifinalists. No on-site problem. No LEAP interview.

SciVis

Pre-Conference Event

OVERVIEW:	No change
ELIGIBILITY:	3 teams or individuals per chapter
TIME LIMITS:	Delete D-E. No semifinalists. No presentation. No LEAP interview. Entries and LEAP Leadership Resume submitted Pre-Conference.
LEAP LEADERSHIP RESUME/INTERVIEW:	No semifinalists. No LEAP interview. LEAP Leadership Resume submitted Pre-Conference.
ATTIRE:	See Page 6-7 of this guide for required dress code.
PROCEDURE:	A. Entries and LEAP Leadership Resume submitted Pre-Conference. D. No semifinalists. E-G. No semifinalists. No presentation. No LEAP interview. Entries and resume submitted Pre-Conference.
REGULATIONS:	Delete F. No semifinalists. No presentation. Entries and resume submitted Pre-Conference. G. Entries are picked up by participants at the time and place stated in the conference program. H. No semifinalists. No LEAP interview. LEAP Leadership Resume submitted Pre-Conference. ***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 90 points: • Portfolio (30) • Visualization (50) • LEAP Leadership Resume (10) No semifinalists. No presentation. No LEAP interview.

Software Development

Pre-Conference Event

OVERVIEW:	No semifinalists. No presentation. Portfolio and CD/DVD submitted Pre-Conference.
ELIGIBILITY:	3 teams per chapter
TIME LIMITS:	B. No presentation. C. No semifinalists. No LEAP interview. Entries and LEAP Leadership Resume submitted Pre-Conference.
LEAP LEADERSHIP RESUME/INTERVIEW:	No semifinalists. No LEAP interview. LEAP Leadership Resume submitted Pre-Conference.
ATTIRE:	See Page 6-7 of this guide for required dress code.
PROCEDURE:	A-I. Entries and LEAP Leadership Resume submitted Pre-Conference. No presentation. No semifinalists. No LEAP interview. No on-site component.
REGULATIONS:	B. Entries are picked up by participants at the time and place stated in the conference program. C. No semifinalists. No LEAP interview. LEAP Leadership Resume submitted Pre-Conference. ***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 110 points: • Documentation (40) • Software design (60) • LEAP Leadership Resume (10) No presentation. No semifinalist. No LEAP interview.

STEM Careers

Pre-Conference Event

OVERVIEW:	No semifinalists. No interview. Entries submitted Pre-Conference.
ELIGIBILITY:	2 individuals per chapter.
TIME LIMITS:	A. Entries submitted Pre-Conference. Delete C-D. No semifinalists. No interviews. Entries submitted Pre-Conference.
LEAP LEADERSHIP RESUME/INTERVIEW:	LEAP Leadership Resume submitted Pre-Conference. No semifinalists. No LEAP interview.
ATTIRE:	See Page 6-7 of this guide for required dress code.
PROCEDURE:	B. Video must be submitted on a DVD, and be playable from a stand-alone DVD player. Documentation portfolio, video (on DVD), and LEAP Leadership Resume submitted Pre-Conference (please see Page 5 of this guide for submission information). Delete C-F. No semifinalists. No interviews. Entries submitted Pre-Conference. Winners announced at Awards Ceremony.
REGULATIONS:	A. Signed consent forms for all video participants must be included in documentation. See Page 390 of National TSA Competitive Events Guide for a copy of the form. A.5. Video must be submitted on a DVD, and be playable from a stand-alone DVD player. B. LEAP Leadership Resume submitted Pre-Conference. No semifinalists. No 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 student projects.***
EVALUATION:	Evaluation is based on 110 points: • Documentation (40) • Skill research (20) • Video (40) • LEAP Leadership Resume (10) No semifinalist interview. No LEAP interview.

Structural Design and Engineering

On-Site Event

2018 Problem Statement: http://www.tsaweb.org/Themes-and-Problems
2018 Design Brief: http://www.tsaweb.org/Themes-and-Problems
Team Assessment Form: http://www.tsaweb.org/Themes-and-Problems

OVERVIEW:	All participants bring the following on conference day to be evaluated/tested: • Pre-Built Structure • Team Verification Form • Analysis and Assessment Form • Drawing • LEAP Leadership Resume 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
TIME LIMITS:	Delete B-D. No semifinalists. No on-site construction. No LEAP interview.
LEAP LEADERSHIP RESUME/INTERVIEW:	LEAP Leadership Resume submitted at event check-in. No semifinalists. No LEAP interview.
ATTIRE and SAFETY EYEWEAR:	See Page 6-7 of this guide for required dress code. Students bring their own safety glasses. They must be worn in any marked safety zones within the competition room.
PRE-BUILT STRUCTURE REGULATIONS:	No change
PROCEDURE FOR ON-SITE DESTRUCTIVE TESTING OF PRE-BUILT STRUCTURES:	D-E. No semifinalists. No on-site problem Destructive Testing of Pre-Built Structures only. All participants bring the following on conference day to be evaluated/tested: • Pre-Built Structure • Team Verification Form • Analysis and Assessment Form • Drawing • LEAP Leadership Resume

	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.. Delete Procedure for Semifinalist On-Site Construction and Destructive Testing. ***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:	Please see official rating form. No on-site construction. No LEAP interview. LEAP Leadership Resume (10 points) submitted at event check-in.

System Control Technology

Static Event

2018 Design Problem will be posted on the NJ TSA website on January 15, 2018

OVERVIEW:	Delete "on site." Model is constructed off-site during the school year.
ELIGIBILITY:	2 teams of 3 members per chapter
TIME LIMITS:	Design problem will be posted on the NJ TSA website on January 15, 2018. Delete A. Model is constructed off-site. No on-site portion. B. There will be a 15 minute set up time (students set up completed model and leave instructions for evaluators to operate the device). Delete C. D. Model is constructed off-site. Delete E. No semifinalists. No LEAP interview.
LEAP LEADERSHIP RESUME/INTERVIEW:	LEAP Leadership Resume submitted at project check-in. No semifinalists. No LEAP interview.
ATTIRE:	See Page 6-7 of this guide for required dress code.
PROCEDURE:	Delete A-E. All components of project constructed off-site. Instructions must be left for evaluators to operate the device during evaluation. Delete G-I. No semifinalists. No LEAP interview. LEAP Leadership Resume submitted during project check-in.
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:	Evaluation is based on 110 points: • Inventor's log (20) • Solution to problem (60) • Programming structure (20) • LEAP Leadership Resume (10) No semifinalists. No LEAP interview.

Technology Bowl

On-Site Event

OVERVIEW:	All participants will complete a written exam and then participate in the oral event.
ELIGIBILITY:	1 team of 3 members per chapter
TIME LIMITS:	A. 45 minutes B. All teams will participate in the oral competition.
LEAP LEADERSHIP RESUME/INTERVIEW:	There is no LEAP Leadership Resume or LEAP interview required.
ATTIRE:	See Page 6-7 of this guide for required dress code.
PROCEDURE:	Delete A-K. Follow the procedures listed below: 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:	Delete A-C. Follow regulations listed below: A. No transmitting or recording devices, including cell phones, 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:	Delete A-B. Follow evaluation listed below: 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.

Technology Problem Solving

On-Site Event

OVERVIEW:	No change
ELIGIBILITY:	1 team of 2 members per chapter
TIME LIMITS:	B. No semifinalists. No LEAP interview.
LEAP LEADERSHIP RESUME/INTERVIEW:	No resume. No interview.
ATTIRE:	See Page 6-7 of this guide for required dress code.
PROCEDURE:	A. No LEAP Leadership Resume required. C. NJ TSA will provide all necessary tools and materials. Each team member must bring his/her own safety glasses. E. NJ TSA will provide all necessary tools and materials. Delete H-J. No semifinalists. No LEAP interview. K. No finalists. 1st, 2nd and 3rd place winners announced at Awards Ceremony.
REGULATIONS:	Delete D. No LEAP resume or interview required.
EVALUATION:	No LEAP component.

Transportation Modeling

Static Event

2018 Theme: The History of Stock Car Racing

OVERVIEW:	No change
ELIGIBILITY:	2 individuals per chapter
TIME LIMITS:	No change
LEAP LEADERSHIP RESUME/INTERVIEW:	LEAP Leadership Resume submitted on conference day at project check-in. No semifinalists. No LEAP interview.
ATTIRE:	See Page 6-7 of this guide for required dress code.
PROCEDURE:	A. Entries are submitted on conference day. Delete C-E. No semifinalists. No LEAP interview.
REGULATIONS:	C. LEAP Leadership Resume submitted at project check-in. No semifinalists. No LEAP 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 student projects.***
EVALUATION:	Evaluation is based on 130 points: • Model and display (50) • Documentation (70) • LEAP Leadership Resume (10) No semifinalists. No LEAP interview.

VEX Robotics

On-Site Event

OVERVIEW:	Go to http://www.tsaweb.org/Vex-Robotics-Competition Questions related to VEX should be directed to: Vickie Vo at the National TSA Office: vvo@tsaweb.org or Henry Harms, NJ TSA Competitive Event Coordinator: harms@tcnj.edu
ELIGIBILITY:	1 team of up to 6 members per chapter.
TIME LIMITS:	
LEAP LEADERSHIP RESUME/INTERVIEW:	No resume. No interview.
ATTIRE:	See Page 6-7 of this guide for required dress code.
PROCEDURE:	
REGULATIONS:	
EVALUATION:	

Video Game Design

Pre-Conference Event

Participants focus on the idea of their choice, within the context of the 2018 theme: Sports Games

OVERVIEW:	No change
ELIGIBILITY:	1 team of 2-6 members per chapter
TIME LIMITS:	C. Judges will only view and evaluate the first five (5) minutes of the game. E. No semifinalists. No LEAP interview.
LEAP LEADERSHIP RESUME/INTERVIEW:	LEAP Leadership Resume submitted Pre-Conference. No semifinalists. No LEAP interview.
ATTIRE:	See Page 6-7 of this guide for required dress code.
REGULATIONS:	A. No semifinalists. Video game is submitted and judged Pre-Conference. Entries are put on display on conference day. B. No semifinalists. No on-site component. No interview. Entry submitted Pre-Conference. D. PLEASE NOTE: The Game must execute and be played directly from a DVD. Entries will be evaluated using only a PC platform. Participants will not be permitted to install anything on evaluators' computers. Judges will only view and evaluate the first five (5) minutes of the game. G. Entries are picked up by participants at the time and place stated in the conference program. J. LEAP Leadership Resume submitted Pre-Conference. No semifinalists. No LEAP 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 student projects.***
EVALUATION:	Evaluation is based on 105 points: • Documentation (40) • Game design (40) • LEAP Leadership Resume (10) • Possible bonus points for exceptional game features (15) No semifinalists. No on-site interview. No LEAP interview.

Webmaster

Pre-Conference Event

2018 Topic: http://www.tsaweb.org/Themes-and-Problems

OVERVIEW:	No semifinalists. No on-site component. Entry submitted Pre-Conference. A copy of the design brief can be found at: http://www.tsaweb.org/Themes-and-Problems
ELIGIBILITY:	1 team of 3-5 members per chapter. No semifinalists. No interview. 1st, 2nd and 3rd place winners announced at Awards Ceremony.
TIME LIMITS	A-B. Change date from May 15 to March 22, 2018. Send URL to tsachall@tcnj.edu. Delete C. No semifinalists. No on-site interview Delete D. No semifinalists. No LEAP interview.
LEAP LEADERSHIP RESUME/INTERVIEW	LEAP Leadership Resume submitted Pre-Conference as an attachment to the email containing the chapter's entry (URL). No semifinalists. No LEAP interview.
ATTIRE:	See Page 6-7 of this guide for required dress code.
REGULATIONS:	Delete H. No on-site interview. I. LEAP Leadership Resume submitted Pre-Conference as an attachment to the email containing the chapter's entry (URL). No semifinalists. No LEAP interview.
EVALUATION:	Evaluation based on 140 points: • Website (130) • LEAP Leadership Resume (10) No semifinalists. No on-site interview. No LEAP interview. URL's MUST be emailed to tsachall@tcnj.edu by 11:59pm EST March 22, 2018. All emails will be time stamped and serve as proof of submitting project on time. Be sure to include ID# & Webmaster Submission in subject line.