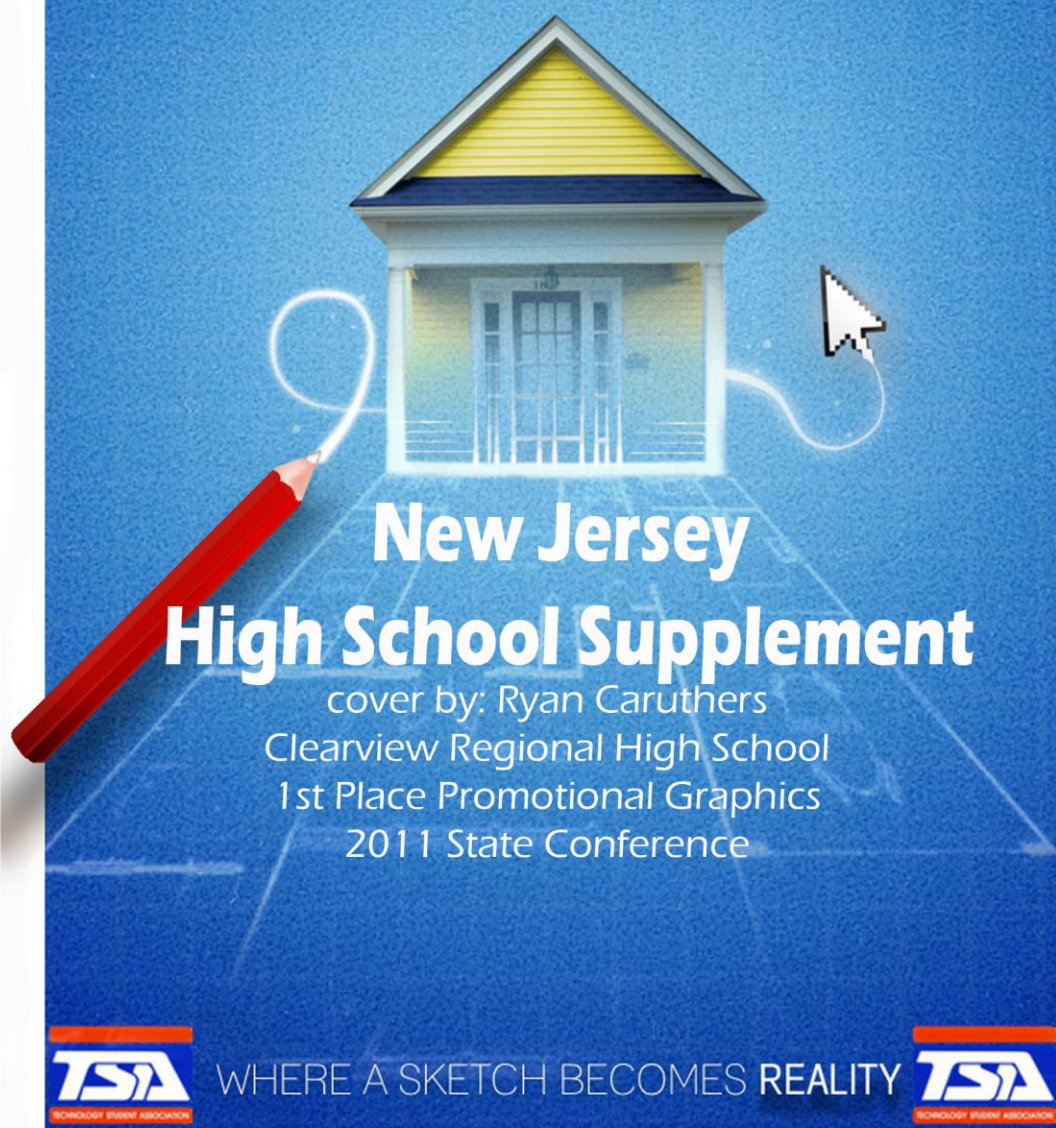


**REVISED 1/25/12**

# CAD 2D ARCHITECTURE



**REVISED 1/25/12**

# 2011-2012 New Jersey TSA

## Executive Committee

### **State Officers**

Emily Bujnowski	President	Clearview Regional High School
Anthony Graybush	Vice President	Freehold Twp. High School
Mark Catugas	Secretary	Clearview Regional High School
Jakub Frankowicz	Treasurer	Howell High School
Derek Liu	Sergeant-at-Arms	High Technology High School
Stefania Gonzalez	Reporter	Howell High School
Emily Chen	Historian	High Technology High School

### **State Advisor and Corporate Member**

Ms. Alison Goeke, Department of Technological Studies & The Center for Excellence in STEM Education, The College of New Jersey

### **Competitive Event Coordinator**

Mr. Henry Harms, Stevens Institute of Technology & The Center for Excellence in STEM Education, The College of New Jersey

### **State Officer Advisors**

Mrs. Melissa Parr	Clearview Regional High School
Mr. Thomas Jennings	Freehold Twp. High School
Mr. Robert Dennis	High Technology High School
Ms. Sherry Roses	Howell High School

### **State Regional Coordinators**

Mr. John McConnell	Stockholm, NJ	Northern Regional
Ms. Sherry Roses	Howell High School	Southern Regional

## Forward

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 February 29, 2012. The High School State Conference will be held at The College of New Jersey on March 28, 2012.

### **How this booklet works**

The NJ Supplement works in conjunction with the National TSA Competitive Events Guide found on the High School Competitive Events CD, which should be received 2-4 weeks 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.

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 better prepare for this exciting conference.

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

**Plan now to attend the  
34<sup>th</sup> Annual  
National TSA Conference  
June 21 – June 25, 2012  
Nashville, Tennessee  
Theme: “*The Road to Success*”**

## **PLEASE NOTE**

**Events are listed in 3 categories: On-Site, Pre-Conference, Static**

**On-site Events** are presented and participated in the day of the conference some events may include components that should be completed prior to the conference.

**Pre-Conference Events** are submitted before the conference takes place on their designated submission dates. They are judged prior to the conference and put on display. Some events contain components or presentations the day of the conference.

**Static Events** are events in which entry is created prior to conference and is submitted for judging upon arrival to the conference. Judging is behind closed doors. After judging takes place submissions will be put on display.

# 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	Career Comparisons	Architectural Model
Biotechnology Design	Computer-Aided Design (CAD), 2D, Architecture	Manufacturing Prototype
Chapter Team	Computer-Aided Design (CAD), 3D, Engineering	System Control Technology
Construction Renovation	Desktop Publishing	
Debating Technological Issues	Digital Video Production	
Engineering Design	Dragster Design	
Essays on Technology	Fashion Design <b>All components submitted Pre-Conference/ Runway show takes place On-Site</b>	
Extemporaneous Speech	Future Technology Teacher <b>Documentation submitted Pre- Conference/Presentation takes place On- Site</b>	
Flight Endurance	Music Production	
Prepared Presentation	On Demand Video	
Structural Engineering	Photographic Technology	
Technical Sketching and Application	Promotional Graphics	
Technology Bowl	SciVis	
Technology Problem Solving	Transportation Modeling	
VEX Robotics	Video Game Design	
	Webmaster	

## II. PROJECT SUBMISSION

- A. On-site events require projects that are submitted and judged *at* the conference.
- B. Static events are On-site events that include a display.
- C. Pre-Conference events require projects that are submitted and judged *prior to* the conference
  - 1. Pre-Conference entries mailed must be received by **March 13, 2012**.

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

Please call (609)771-2295 or fax (609)771-3330 the NJ-TSA office to indicate description and quantity of items being mailed.

- 2. Entries dropped off at the NJ-TSA office at The College of New Jersey must be received by **March 13, 2012**. Please call (609)771-2295 the TSA office to arrange time for delivery. If submitting entries through the mail or other carrier services please email [ordini@tcnj.edu](mailto:ordini@tcnj.edu) with date of shipment and contents of package.
- 3. Entries dropped off at the Northern NJ site (NJ-TSA Northern Regional Office, 16 Deer Trail Lake Rd., Stockholm, NJ 07460) must be received by **March 12, 2012**. Please call John McConnell at 973-903-1970 to arrange time for delivery.
  - 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 requires school information. Otherwise, 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.**

- E. **All video/electronic files (e.g. Music Production, Video Game Design, Digital Video Production) become the property of NJ-TSA. Please be sure to make a copy for yourself before project submission.**
- F. Projects/entries are picked up at the time stated in the conference program.
- G. Audio visual equipment will be provided for competitive events that require it.

#### 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.

- A. Official TSA Attire: *An official blue shirt is being introduced as part of the official TSA attire and the female tie is being eliminated. For more info go to: <http://www.tsaweb.org/Dress-Code>*  
Blazer: navy blue with official TSA patch  
Ties: scarlet red imprinted with official TSA logo (for males and females)  
Shirt or blouse: white, button-up with turn down collar  
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 NJTSA Polo Shirt may be substituted for a collared shirt/blouse.  
(Order form available on NJ-TSA Website)

**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 position 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

### **New Jersey TSA Scholarship**

\$500 scholarship supports the mission of TSA by encouraging NJ-TSA members to continue their education.

#### Criteria

- Be a senior and have participated in an active TSA chapter for a minimum of two consecutive years.
- Served or currently serving as a TSA officer at the local, state and/or national level for a minimum of one academic year.
- Attend and participate in at least two TSA conferences at the state level.

#### Application must include:

- A signed cover letter containing:
  1. A detailed description of the applicant's involvement in TSA based on the above criteria
  2. A list of technology education engineering courses completed and in progress.
  3. SAT score and/or ACT score
  4. GPA (4.0 scale) and if available high school class rank (indicate how many in class)
- No more than three letters of reference, one of which must come from a technology education teacher.
- A single-spaced, one page typed essay on his or her career plans.

#### Application must be submitted by

*March 13, 2011 to:*

Alison Goeke, State Advisor  
New Jersey Technology Student Association  
The College of New Jersey  
103 Armstrong Hall, PO Box 7718  
Ewing, NJ 08628-0718

### **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](mailto:goeke2@tcnj.edu)/Fax#609-771-3330) with a list of any award winners and their Activity Resumes by March 13, 2011. 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](mailto:goeke2@tcnj.edu)/Fax#609-771-3330) by March 13, 2011.

### **Johnson & Wales University**

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

- Computer-Aided Design 2D, 3D
- Promotional Graphics
- Technical Sketching & Applications
- Webmaster

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

1 <sup>st</sup> place winner	\$1000
2 <sup>nd</sup> place winner	\$750
3 <sup>rd</sup> place winner	\$500

## **VII. IMPORTANT DATES AND DEADLINES**

### January 23, 2012

- State Conference Registration OPENS
- Design Problems posted on NJTSA website (<http://njtsa.pages.tcnj.edu/>)

### February 29, 2012

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

### March 8, 2012

- On Demand Video theme posted at 5pm on NJTSA website (<http://njtsa.pages.tcnj.edu/>)

### March 12, 2012

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

### March 12, 2012

- On Demand Video entries must be received at the NJTSA office or postmarked by 5pm.

### March 13, 2012

- NJTSA Scholarship, Achievement Award, Technology Honor Society and State Officer Nominations must be received at the NJTSA office by 5pm.

### March 13, 2012

- All Pre-Conference entries must be received at the NJTSA office.

### March 28, 2012

- NJTSA High School State Conference, The College of New Jersey

### May 15, 2012

- Nationals Registration for all Advisor Approved Events
- Meeting Regarding Nationals for all that plan/wish to attend
- Webmaster Entries submitted by midnight

### June 21-25, 2012

- National TSA Conference, Nashville, TN



## Level II – High School Events

### Animatronics

#### On-Site Event

OVERVIEW:	No change
PURPOSE:	No change
ELIGIBILITY:	A. 3 teams of 3 individuals per chapter B. No semifinalists. All teams will give a presentation up to 5 minutes in length.
TIME LIMITS	No change
PROCEDURE:	No change
REGULATIONS:	No change
EVALUATION:	No change. <b><i>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.</i></b>

### Architectural Model

#### Static Event

Challenge-“Design a Senior Citizen Day Care Center.”

OVERVIEW:	No change
PURPOSE:	No change
ELIGIBILITY:	1 individual or team per chapter
TIME LIMITS	No change
PROCEDURE:	Delete C, D, E
REGULATIONS:	No change
EVALUATION:	Evaluation is based on 80 points earned for the portfolio and the architectural model. <b><i>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.</i></b>

## Biotechnology Design

### On-Site Event

Theme: "Pharmaceutical/Agricultural Chemicals"

<b>OVERVIEW:</b>	No change
<b>PURPOSE:</b>	No change
<b>ELIGIBILITY:</b>	A. 3 teams of 2 or more individuals per chapter B. No semifinalists. All teams give presentation.
<b>TIME LIMITS</b>	B. No semifinalists. All teams will give a presentation up to 10 minutes in length.
<b>PROCEDURE:</b>	C. No semifinalists. Winners announced at Awards Ceremony Delete D, E
<b>REGULATIONS:</b>	E-F. No semifinalists. Winners announced at Awards Ceremony.
<b>EVALUATION:</b>	No semifinalists. All teams give presentation. <b><i>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.</i></b>

## Career Comparisons

### Pre-Conference Event

<b>OVERVIEW:</b>	Delete “Semifinalists also participate in an on site job interview”
<b>PURPOSE:</b>	Delete “and be prepared to participate in a mock interview as a semifinalist.”
<b>ELIGIBILITY:</b>	2 individuals per chapter
<b>TIME LIMITS</b>	A. Job application submitted Pre-Conference. Delete B.
<b>PROCEDURE:</b>	Delete D – H Job application will be posted on the NJTSA website on January 23, 2012 and should be included in the binder/notebook with the resume, cover letter and other required items listed under Regulations C.1-6.
<b>REGULATIONS:</b>	C. Binder/notebook is submitted Pre-Conference. D. There is no on-site component.
<b>EVALUATION:</b>	Based on 70 points. No interview. <b><i>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.</i></b>

## Chapter Team

### On-Site Event

<b>OVERVIEW:</b>	No change
<b>PURPOSE:</b>	No change
<b>ELIGIBILITY:</b>	1 team of six (6) members per chapter. Team members do not have to be elected officers of the local chapter.
<b>TIME LIMITS</b>	B. No semifinalists. Time-related penalties apply
<b>PROCEDURE:</b>	C-D All teams will make the oral presentation
<b>REGULATIONS:</b>	No change
<b>EVALUATION:</b>	No change

## Computer-Aided Design (CAD), 2D, Architecture

### Pre-Conference Event

<b>OVERVIEW:</b>	No change This design problem will be posted on the NJTSA website on January 23, 2012.
<b>PURPOSE:</b>	No change
<b>ELIGIBILITY:</b>	3 individuals per chapter
<b>TIME LIMITS</b>	Entries must be completed during the school year and are submitted Pre-Conference. Design problem will be posted on the NJTSA website on January 23, 2012.
<b>PROCEDURE:</b>	Delete A-I Entries are picked up at the time and place stated in the conference program.
<b>REGULATIONS:</b>	Delete A-D Delete F-G  Designs submitted on a maximum paper size of 24" x 36" or smaller sheets mounted on a 24" x 36" sheet with no overlapping papers.  <b><i>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.</i></b>
<b>EVALUATION:</b>	Delete "on screen."

## Computer-Aided Design (CAD), 3D, Engineering Pre-Conference Event

<b>OVERVIEW:</b>	No change This design problem will be posted on the NJTSA website on January 23, 2012.
<b>PURPOSE:</b>	No change
<b>ELIGIBILITY:</b>	3 individuals per chapter
<b>TIME LIMITS</b>	Entries must be completed during the school year and are submitted Pre-Conference. Design problem will be posted on the NJTSA website January 23, 2012.
<b>PROCEDURE:</b>	Delete A-I Entries are picked up at the time and place stated in the conference program.
<b>REGULATIONS:</b>	Delete A-D Delete F-G  Designs submitted on a maximum paper size of 24" x 36" or smaller sheets mounted on a 24" x 36" sheet with no overlapping papers.  <b><i>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.</i></b>
<b>EVALUATION:</b>	Delete "on screen."



## Construction Renovation

### On-Site Event

<b>OVERVIEW:</b>	This design problem is the National TSA design problem, "Band Practice/Recording Studio," and can be found at: <a href="http://www.tsaweb.org/High-School-Competitions">http://www.tsaweb.org/High-School-Competitions</a>
<b>PURPOSE:</b>	No change
<b>ELIGIBILITY:</b>	2 teams of 2-5 individuals per chapter, 1 entry per team.
<b>TIME LIMITS</b>	Delete B No semifinalists. All teams do presentation/interview.
<b>PROCEDURE:</b>	A. Design problem can be found on the National TSA website at: <a href="http://www.tsaweb.org/High-School-Competitions">http://www.tsaweb.org/High-School-Competitions</a> . D-E. No semifinalists. All teams do presentation/interview. Winners announced at Award Ceremony.
<b>REGULATIONS:</b>	No change
<b>EVALUATION:</b>	Evaluation is based on the documentation, display and the presentation/interview (100 points)

## Debating Technological Issues

### On-Site Event

#### Topic: Biotechnology

Subtopics 1- Is it appropriate to use emerging synthetic genomic engineering technology to build new forms of "life"?

Subtopic 2- Should genetic engineering techniques and processes be used in agriculture?

Subtopic 3- Should companies that develop genetically altered plants and seeds be allowed to have monopoly on the products they develop?

<b>OVERVIEW:</b>	No change
<b>PURPOSE:</b>	No change
<b>ELIGIBILITY:</b>	1 team of 2 individuals per chapter
<b>TIME LIMITS</b>	No change
<b>PROCEDURE:</b>	E. Full Debate format only as described on Procedure G Delete F, T. U. No semifinalists. Winners announced at Awards Ceremony. W. No finalists. Winners announced at Awards Ceremony.
<b>REGULATIONS:</b>	Delete H
<b>EVALUATION:</b>	No change

## Desktop Publishing

### Pre-Conference Event

Theme: "Beyond Tradition"

Digital entry should be submitted on CD along with final printed product

<b>OVERVIEW:</b>	Delete "All participants work to solve an onsite problem." Notebook submitted Pre-Conference.
<b>PURPOSE:</b>	No change
<b>ELIGIBILITY:</b>	3 individuals per chapter
<b>TIME LIMITS</b>	Delete B-C
<b>PROCEDURE:</b>	Delete C, D, E, F, G, H
<b>REGULATIONS:</b>	<p>Delete A, D, E, F C. Clip art may be used for the notebook items.</p> <p><b><i>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. All submissions will become property of NJ-TSA and will not be returned. Please be sure to keep an extra copy for submission for Nationals or personal use.</i></b></p>
<b>EVALUATION:</b>	Evaluation is based on points earned for notebook development and final printed product.

## Digital Video Production

### Pre-Conference Event

Theme: "Suspense"

All entries become property of NJ-TSA and are not returned. It is strongly recommended that you make multiple copies of entry.

OVERVIEW:	No change  <b>Note:</b> NJ TSA reserves the right to eliminate any entries that contain inappropriate content. These entries will not be judged.
PURPOSE:	No change
ELIGIBILITY:	2 individuals or teams of up to 5 individuals per chapter
TIME LIMITS	No change. Film must be submitted on a DVD that works in a standard DVD player.
PROCEDURE:	C. No finalists. Winners are announced at awards ceremony
REGULATIONS:	C. All entries become the property of NJ-TSA  <b><i>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. All submissions will become property of NJ-TSA and will not be returned. Please be sure to keep an extra copy for submission for Nationals or personal use.</i></b>
EVALUATION:	No change

## Dragster Design

### Pre-Conference Event

- Dragster and drawing will be submitted Pre-Conference
- Cars that do not meet specifications will NOT be raced
  - A caliper will be used for all measurements

OVERVIEW:	No change
PURPOSE:	No change
ELIGIBILITY:	2 individuals per chapter
TIME LIMITS	Delete B  <i>Dragster and drawing will be submitted Pre-Conference Cars that do not meet specifications will NOT be raced</i>
PROCEDURE:	Delete A, F
REGULATIONS:	No change  <i>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.</i>
EVALUATION:	Wind tunnel results eliminated from scoring.  <i>The top 16 dragsters meeting specifications will be raced in the double elimination bracket at the conference. <u>Cars not meeting specs WILL BE DISQUALIFIED from competition.</u> Evaluation is based on 90 points.</i>  <i>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 so that qualifying dragsters can be renumbered for nationals.</i>

## Engineering Design

### On-Site Event

<b>OVERVIEW:</b>	No semifinalists. Winners announced at Awards Ceremony
<b>PURPOSE:</b>	No change
<b>ELIGIBILITY:</b>	2 teams of 3-5 per chapter
<b>TIME LIMITS</b>	B. No semifinalists. All teams will give a presentation of up to 10 minutes in length.
<b>PROCEDURE:</b>	Delete C-D
<b>REGULATIONS:</b>	No change
<b>EVALUATION:</b>	No change

## Essays on Technology

### On-Site Event

Topic: "The Impacts of Ever-Changing Technology on Schools"

Subtopics: -Budget  
 -Computers  
 -World Wide Web  
 - Classroom Technologies

<b>OVERVIEW:</b>	No change
<b>PURPOSE:</b>	No change
<b>ELIGIBILITY:</b>	2 individuals per chapter
<b>TIME LIMITS</b>	No change
<b>PROCEDURE:</b>	H. No finalists. Winners announced at awards ceremony.
<b>REGULATIONS:</b>	All essays become the property of NJ-TSA
<b>EVALUATION:</b>	No change



## Extemporaneous Speech

### On-Site Event

<b>OVERVIEW:</b>	No change
<b>PURPOSE:</b>	No change
<b>ELIGIBILITY:</b>	2 individuals per chapter
<b>TIME LIMITS</b>	No change
<b>PROCEDURE:</b>	Delete C.2, C.3, H, I, J
<b>REGULATIONS:</b>	E. No observers will be permitted
<b>EVALUATION:</b>	No change

## Fashion Design

### Pre-Conference Event

Theme Challenge: Design two outfits that correspond to a specific historical period, such as the Victorian Era, or any other historical period with a particular fashion style.

All Entries are submitted pre-conference. Runway show will take place on-site.

<b>OVERVIEW:</b>	No semifinalists. All participants do runway presentation.
<b>PURPOSE:</b>	No change
<b>ELIGIBILITY:</b>	2 teams of 2-4 individuals per chapter
<b>TIME LIMITS</b>	No change
<b>PROCEDURE:</b>	A-B. Portfolio and garments submitted Pre-Conference C. No semifinalists. All participants do runway presentation. D. No semifinalists. F. No semifinalists. All participants do runway presentation. H. No semifinals. Winners announced at Awards Ceremony.
<b>REGULATIONS:</b>	A. Portfolio and garments submitted Pre-Conference. Runway show done on-site. <b>No school or individual names labeled on projects; only ID#'s are to be used.</b> Upon registering students online, they are automatically assigned an ID#. <b>This number needs to be on all parts of student projects.</b> Labels/tape are recommended for labeling inside of garments, on documentation, and on outside of submission container.
<b>EVALUATION:</b>	No semifinalists. Winners announced at Awards Ceremony.

## Flight Endurance

Plane built off-site and submitted for judging upon arrival to event

### On-Site Event

OVERVIEW:	No change
PURPOSE:	No change
ELIGIBILITY:	2 individuals per chapter, one entry per individual
TIME LIMITS	Participants are provided a minimum of 20 minutes for trim flights at the event's site.
PROCEDURE:	K. No finalists. Winners announced at Awards Ceremony.
REGULATIONS:	No change
EVALUATION:	No change. <b><i>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 so that qualifying planes can be renumbered for nationals</i></b>

## Future Technology Teacher

### On-Site Event

Documentation is submitted pre-conference and presentation is done on-site

<b>OVERVIEW:</b>	No change
<b>PURPOSE</b>	No change
<b>ELIGIBILITY:</b>	Entries are limited to three (3) individuals per chapter.
<b>TIME LIMITS</b>	B. Notebook submitted Pre-Conference
<b>PROCEDURE:</b>	F. Notebook submitted Pre-Conference. Delete G. H. No semifinalists. All participants present lesson plan/activity.
<b>REGULATIONS:</b>	No change  <b><i>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.</i></b>
<b>EVALUATION:</b>	No change

## Manufacturing Prototype

### Static Event

Product: "A complete desk set"

The set must include but is not limited to-a coaster, a double paper tray, a pen and pencil holder, and a business card holder

<b>OVERVIEW:</b>	No change
<b>PURPOSE:</b>	No change
<b>ELIGIBILITY:</b>	2 teams per chapter
<b>TIME LIMITS</b>	No change
<b>PROCEDURE:</b>	No change
<b>REGULATIONS:</b>	No change
<b>EVALUATION:</b>	No change. <b><i>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.</i></b>

## Music Production

### Pre-Conference Event

All entries become the property of NJ-TSA and are not returned after the conference. It is strongly recommended that participants make multiple copies.

OVERVIEW:	No change
PURPOSE:	No change
ELIGIBILITY:	2 teams per chapter. Team work is strongly encouraged, but a team of 1 member is permitted.
TIME LIMITS	D. No semifinalists. No interview. Entries submitted Pre-Conference.
PROCEDURE:	Delete C-D.
REGULATIONS:	E. All entries become the property of NJ-TSA
EVALUATION:	Based on 100 points. No interview.
	<b><i>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. All submissions will become property of NJ-TSA and will not be returned. Please be sure to keep an extra copy for submission for Nationals or personal use.</i></b>

## **On Demand Video**

### **Pre-Conference Event**

See NJ-TSA Website at 5pm on March 8 for Theme Announcement.

<b>OVERVIEW:</b>	Video and notebook submitted by March 10, 2012.
<b>PURPOSE:</b>	No change
<b>ELIGIBILITY:</b>	1 team of 2 or more individuals per chapter. One entry per team.
<b>TIME LIMITS</b>	Delete A, C. Theme will be posted on the NJ-TSA website at 5pm on March 8, 2012. Students will have 48 hours to create their video and notebook. Entries must be received at the NJ-TSA Office or postmarked by 5pm on March 12, 2012.
<b>PROCEDURE:</b>	A. Notebook and video submitted Pre-Conference (by March 12, 2012). B. Theme will be posted on the NJ-TSA website on March 8, 2012. Delete E-G. Winners announced at Award Ceremony.
<b>REGULATIONS:</b>	B. Notebooks and videos become the property of NJ-TSA.
<b>EVALUATION:</b>	No change



## Photographic Technology

### Pre-Conference Event

Topic: "Perspectives"

<b>OVERVIEW:</b>	No semifinalists. Winners will be announced at Awards Ceremony. Documentation binder and multimedia presentation submitted Pre-Conference
<b>PURPOSE:</b>	No semifinalists.
<b>ELIGIBILITY:</b>	2 individuals per chapter, 1 entry per individual
<b>TIME LIMITS</b>	No change
<b>PROCEDURE:</b>	<p>B. Entries are reviewed by evaluators and winners are announced at the awards program. No semifinalists. Delete C – K</p> <p>I. Multimedia presentation submitted on a CD or DVD and must include 15 photos in a PowerPoint presentation. No semifinalists. All individuals submit the multimedia presentation Pre-Conference.</p>
<b>REGULATIONS:</b>	<p>No change Please read Regulations carefully, paying close attention to size requirements. <b><i>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.</i></b></p>
<b>EVALUATION:</b>	Evaluation is based on 200 points earned for the documentation binder and multimedia presentation. There is no On-Site challenge.

## Prepared Presentation

### On-Site Event

Theme: "Our Dreams, Tomorrow's Reality"

<b>OVERVIEW:</b>	No change
<b>PURPOSE:</b>	No change
<b>ELIGIBILITY:</b>	2 individuals per chapter
<b>TIME LIMITS</b>	No change
<b>PROCEDURE:</b>	D. No observers will be permitted. Delete E-G
<b>REGULATIONS:</b>	No change
<b>EVALUATION:</b>	No change

## Promotional Graphics

### Pre-Conference Event

Options: -On Demand Video  
-Biotechnology Design  
-Prepared Presentation

<b>OVERVIEW:</b>	No change
<b>PURPOSE:</b>	No change
<b>ELIGIBILITY:</b>	2 individuals per chapter, 1 entry each
<b>TIME LIMITS</b>	No change
<b>PROCEDURE:</b>	A. Entries submitted Pre-Conference. Submit entry in JPG format as well on CD C. No finalists. Winners are announced at the Awards Ceremony.
<b>REGULATIONS:</b>	Delete D  <b><i>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. All submissions will become property of NJ-TSA and will not be returned. Please be sure to keep an extra copy for submission for Nationals or personal use.</i></b>
<b>EVALUATION:</b>	No change.

**SciVis**  
**Pre-Conference Event**

<b>OVERVIEW:</b>	No change
<b>PURPOSE:</b>	No change
<b>ELIGIBILITY:</b>	2 teams of 2-5 per chapter
<b>TIME LIMITS</b>	Delete D. Entries submitted Pre-Conference
<b>PROCEDURE:</b>	Delete A-D. Entries submitted Pre-Conference
<b>REGULATIONS:</b>	<p>Delete E (No presentation)</p> <p><b><i>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. All submissions will become property of NJ-TSA and will not be returned. Please be sure to keep an extra copy for submission for Nationals or personal use.</i></b></p>
<b>EVALUATION:</b>	<p>No interview will be included in the scoring.</p> <p>Evaluation will be based on 75 points.</p>

# Structural Engineering

## On-Site Event

Topic: "Build a 12" tower"

<b>OVERVIEW:</b>	No change
<b>PURPOSE:</b>	No change
<b>ELIGIBILITY:</b>	1 team of 2 per chapter
<b>TIME LIMITS</b>	A. Change time from 2.5 hours to 1.5 hours Delete B-C
<b>ATTIRE and SAFETY EYEWEAR</b>	Students must bring their own safety eyewear.
<b>PROCEDURE:</b>	<p>Delete B. Each team will receive:</p> <ul style="list-style-type: none"> <li>-A blade and anvil cutter</li> <li>-Straight pins and pin board</li> <li>-1 (1oz) bottle of CA glue</li> <li>-wax paper</li> <li>-ruler</li> </ul> <p>C.1.c. Load plate (3" square of ¼" plywood) to be attached to the bottom of the tower.</p> <p>C.2.a. Students bring PREPARED PLANS.</p> <p>F. The height of the tower is 12 inches.</p> <p>Delete G</p>
<b>REGULATIONS:</b>	D. Students must bring two copies of prepared sketch to conference. E. The height is 12 inches.
<b>EVALUATION:</b>	<p>No change</p> <p>Please note:</p> <p>H. Structures are not to be tested if</p> <ol style="list-style-type: none"> <li>1. there are two (2) or more rules violations.</li> <li>2. the structure cannot be placed on the tester.</li> <li>3. the testing hook cannot be placed in the center of the structure.</li> <li>4. straight pins are left in the structure.</li> <li>5. there is failure to wear safety eyewear.</li> <li>6. conduct unbecoming a TSA conference participant is evident during check-in, fabrication or testing.</li> </ol>

## System Control Technology

### Static Event

<b>OVERVIEW:</b>	Delete "on site."
<b>PURPOSE:</b>	No change
<b>ELIGIBILITY:</b>	1 team of 3 per chapter
<b>TIME LIMITS</b>	Design problem will be posted on the NJ-TSA website on January 23, 2012. A. There will be a 15 minute set up time (students set up the device and leave instructions for evaluators to operate the device). Delete B. C. Model is constructed off-site
<b>PROCEDURE:</b>	Delete B C. Inventor's log is completed off-site. Delete D-E
<b>REGULATIONS:</b>	No change
<b>EVALUATION:</b>	Stand-alone project. Instructions must be left for evaluators to operate the device.

## Technical Sketching and Application

### On-Site Event

<b>OVERVIEW:</b>	No change
<b>PURPOSE:</b>	No change
<b>ELIGIBILITY:</b>	2 individuals per chapter
<b>TIME LIMITS</b>	A. Participants are allowed 1 hour for written test. B. No semifinalists. All participants have 1 hour for on-site problem.
<b>PROCEDURE:</b>	C. No semifinalists. Winners will be announced at Awards Ceremony. D. No semifinalists. Winners will be announced at Awards Ceremony. All participants take the written test and solve on-site problem.
<b>REGULATIONS:</b>	A. No semifinalists. Winners will be announced at Awards Ceremony. B. All participants will receive the necessary materials. C. No semifinalists. Winners will be announced at Awards Ceremony.
<b>EVALUATION:</b>	Delete A-B. Evaluation is based on 50 point test and 50 point evaluation of technical sketch/drawing.



## Technology Bowl

### On-Site Event

<b>OVERVIEW:</b>	All participants will complete a written exam and then participate in the oral event.
<b>PURPOSE:</b>	No change
<b>ELIGIBILITY:</b>	1 team of 3 per chapter
<b>TIME LIMITS</b>	A. 45 minutes B. All teams will participate in the oral competition.
<b>PROCEDURE:</b>	<p>Delete A-K. Follow the procedures listed below:</p> <ul style="list-style-type: none"> <li>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.</li> <li>B. Team members will not be allowed in the oral event area as observers until after the team has been eliminated from competition.</li> <li>C. When instructed to do so, two (2) teams will enter the event area and be seated according to instructions.</li> <li>D. When a team has been defeated in any round of the oral event, the team is out of the competition.</li> <li>E. Questions will be drawn, as needed, from a card file resource bank.</li> <li>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 a 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.</li> <li>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.</li> <li>H. <u>Bonus Question</u> There will be one additional question (bonus question). The bonus question will be announced, and the team</li> </ul>

	<p>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.</p> <ol style="list-style-type: none"> <li>I. A panel of evaluators will be available to respond to questions concerning acceptable answers. <ol style="list-style-type: none"> <li>1. Rulings on acceptable answers will be made only during the round in question.</li> <li>2. Rulings will be made immediately, to do one of the following: <ol style="list-style-type: none"> <li>a. Accept only the answers listed on the card.</li> <li>b. Accept the student's answer and renew points, or remove the question and read another in its place.</li> <li>c. The rulings of the panel will be final.</li> </ol> </li> </ol> </li> </ol>
<b>REGULATIONS:</b>	<p>Delete A-B. Follow regulations listed below:</p> <ol style="list-style-type: none"> <li>A. No transmitting or recording devices, including cell phones, will be permitted in the event area. No prompting will be permitted.</li> <li>B. The team member who "buzzes in" will have five (5) seconds to answer the question, without discussion.</li> <li>C. The team that answers the bonus question will be allowed ten (10) seconds to discuss the extra question and give an answer.</li> <li>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.</li> <li>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.</li> </ol>
<b>EVALUATION:</b>	<p>Delete A-C. Follow evaluation listed below:</p> <p>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</p>

## Technology Problem Solving

### On-Site Event

OVERVIEW:	No change
PURPOSE:	No change
ELIGIBILITY:	1 team of 2 per chapter
TIME LIMITS	No change
PROCEDURE:	A. Students will be provided with the necessary tools and materials. A.7. Each team member must bring his/her own safety glasses.
REGULATIONS:	No change
EVALUATION:	No change

## Transportation Modeling

### Pre-Conference Event

Design Theme: "Pre-1960 Antique Vehicle"

OVERVIEW:	No change
PURPOSE:	No change
ELIGIBILITY:	2 individuals per chapter
TIME LIMITS	No change
PROCEDURE:	No time trials will be conducted. Delete A. Entries are submitted Pre-Conference. Delete C-D E. Evaluation is based on notebook and model.
REGULATIONS:	Delete B.  <b><i>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.</i></b>
EVALUATION:	Evaluation is based on points earned for notebook and model (95 points).

## VEX Robotics

### On-Site Event

<b>OVERVIEW:</b>	Go to <a href="http://www.tsaweb.org/Vex-Robotics-Competition">http://www.tsaweb.org/Vex-Robotics-Competition</a>  Questions related to VEX should be directed to:  Hillary Lee at the National TSA Office: <a href="mailto:hlee@tsaweb.org">hlee@tsaweb.org</a> or Henry Harms, NJTSA Competitive Event Coordinator: <a href="mailto:harms@tcnj.edu">harms@tcnj.edu</a>
<b>PURPOSE:</b>	
<b>ELIGIBILITY:</b>	1 team of up to 6 members per chapter
<b>TIME LIMITS</b>	
<b>PROCEDURE:</b>	
<b>REGULATIONS:</b>	
<b>EVALUATION:</b>	

## Video Game Design

### Pre-Conference Event

<b>OVERVIEW:</b>	No change
<b>PURPOSE:</b>	No change
<b>ELIGIBILITY:</b>	2 teams per chapter. There will be a minimum of 2 people per team.
<b>TIME LIMITS</b>	No change
<b>PROCEDURE:</b>	B. No semifinalists. Winners announced at Awards Ceremony. Delete C-D.
<b>REGULATIONS:</b>	B. PLEASE NOTE: The Game must execute and be played directly from the DVD. Entries will be evaluated using only a PC platform. Participants will not be permitted to install anything on evaluators' computers. E. Notebooks and DVD's become the property of NJ-TSA.
<b>EVALUATION:</b>	No semifinalists. Evaluation based on 125 points. No interview.

## Webmaster

### Pre-Conference Event

#### “Post-Shuttle: The Future of American Manned Space Exploration”

<b>OVERVIEW:</b>	A copy of the design brief can be found at: <a href="http://www.tsaweb.org/Themes-and-Problems">http://www.tsaweb.org/Themes-and-Problems</a> Delete “Semifinalists will participate in an on-site interview....”
<b>PURPOSE:</b>	No change
<b>ELIGIBILITY:</b>	1 team of 3-5 per chapter
<b>TIME LIMITS</b>	Change date from May 15 to March 13, 2012. Send URL to <a href="mailto:goeke2@tcnj.edu">goeke2@tcnj.edu</a>
<b>PROCEDURE:</b>	B. All questions must be emailed to <a href="mailto:goeke2@tcnj.edu">goeke2@tcnj.edu</a> Delete D-H
<b>REGULATIONS:</b>	Delete I. No interview.
<b>EVALUATION:</b>	Delete B. No interview. Evaluation based on 90 points.  URL’s MUST be emailed to Alison Goeke, State Advisor ( <a href="mailto:goeke2@tcnj.edu">goeke2@tcnj.edu</a> ) by 12 midnight EST March 13, 2012. All emails will be time stamped and serve as proof of submitting project on time.