DENTON MAGNET SCHOOL OF TECHNOLOGY

ACES PROGRAM APPLICATION 2021 - 2022 SY

\$5 Application Fee (Non-Refundable).
Mail check to:
Denton Magnet School of Technology
ATTN: Debra Quinones
3800 Pleasant Valley Rd.
Mobile, AL 36609

What is the ACES Program?

ACES stands for Advancing Computing, Engineering, and Science. Students in the ACES program will complete a variety of hands on projects in these fields, using the engineering design process, and learning key skills in one of a variety of crafts along the way. The ACES program supports the DMST mission to cultivate curiosity and prepare students to thrive as productive citizens in an evolving, technology-driven, global society.

- Students accepted to the ACES program are grouped with other highly motivated and driven students, giving them
 opportunities to form friendships with one another and have constant intellectual challenges, driving all students to
 reach new heights.
- Students have opportunities to develop key skills for success, like collaboration, leadership, public speaking, planning, problem solving, and business/entrepreneurship.
- Student have opportunities to engage in advanced student led projects using cutting edge tools like our 3D printer, CNC Machine, and more.

APPLICATION WINDOW

There are two application windows for the Denton ACES program. They are announced each year, held in Fall and Spring. No ACES applications will be accepted outside of the application window.

RECEIVING HELP

The ACES Program is very rewarding for students who choose to commit to the program and work hard. Students are expected to have their work reviewed for feedback by peers and adults before submission. However, if it is determined that anyone besides the student did the submission project, the student will be immediately removed from the ACES program.

STUDENTS IN THE ACES PROGRAM

The ACES Program is a full school year commitment. Participation in other school (or out of school) programs will not exclude a student from participating in ACES. However, students should be aware of what the commitment to ACES entails and be prepared schedule their activities so that they can fully complete all of their commitments. For example, a student participating in ACES and the basketball team may plan to complete some of their ACES projects early so that they are not behind after basketball season is over.

PARENTS IN THE ACES PROGRAM

Parents are an important part of our program. As the parent of an ACES student, you are a key part of the support both to your child in this program, but also to the shared goals of the ACES Program. Parents will be called on to help with fundraising, mentoring, planning support, and student monitoring throughout the year in a variety of capacities. As you can see from the general schedule, our whole school year is very busy. We can't do it without you!

ACES - GENERAL YEARLY SCHEDULE (PRE-COVID)

This schedule is a rough outline intended to give parents and students an idea of the commitment to the ACES Program.

August	 Elect TSA officers and determine Fundraising Plan for TSA Travel Build skills, especially: Robot C, 3D modeling, 3D printer, CNC machine Start VEX EDR / Register VEX EDR Teams BEST Robotics Kickoff
September	 Begin Fundraising Plan for TSA Travel TSA - research projects and READ THE RULES BEST Robotics after school and weekend workshops Video ACTE-(Regional Fair) and MCPSS Film Festival Intro Coding ACTE-(Regional Fair) Choose a category
October	 TSA – planning, researching, and implement TSA Fundraising Plan (for travel) BEST Robotics Game Day usually in October Video and Coding Prep work for ACTE Regional
November	 TSA Project #1 and Implement TSA Fundraising Plan (for travel) VEX EDR Build & Design Video and Coding ACTE -(Regional Fair) Project Work MCPSS Film Festival – Get Ideas and Script/Storyboard Approved
December	 TSA Project #2 and Implement TSA Fundraising Plan (for travel) VEX EDR Build & Design
January	 TSA Project #3 and Implement TSA Fundraising Plan (for travel) VEX EDR Tournaments ACTE-(Regional Fair)-MCPSS Film Festival – First Draft of Videos Completed Coding – First draft of coding project completed
February	 VEX EDR Tournaments Spring BEST Robotics Kickoff (beginning of month) ACTE-(Regional Fair)-MCPSS Film Festival – Finish and polish video and presentation notebooks Coding – Finish digital projects and finalize presentation notebooks
March	 VEX Alabama STATE Championship (can qualify for VEX Worlds) SPRING BEST Robotics Game Day (Mid/end of month) TSA County (if available) ACTE Regional (Faulkner Computer Science Fair)
April	 TSA STATE mid-month ACTE STATE end month MCPSS Film Festival Competition

Acceptance emails will go out on or before Friday, April 30, 2021.

	ACTE State (Location TBA)
May	 Spring STEM Fair Prepare for TSA Nationals ACES Application for next year

ACES Student Application 2020 - 2021

INSTRUCTIONS

Read the accompanying pages of this document about the ACES Program and show it to your parents. Complete the design challenge for the pathway that you choose. Document your work in a project portfolio answering the questions listed below the task. Use the project checklist and rubric that accompanies your selection to ensure you are submitting all of the required parts of your application.

ENGINEERING DESIGN PROCESS:

Be aware of how you use the Engineering Design Process to solve the problem.

- 1. Define the problem
- 2. Research and brainstorm solutions
- 3. Build and test a prototype
- 4. Redesign
- 5. Communicate Results

HINTS AND TIPS

- If you feel stuck, follow the engineering design process
- Build your prototype quickly and spend most of your time testing/improving
- At least half of your time should be spent answering the questions
- Be prepared to work on ACES projects at home
- Always make sure to read the rules and instructions
- Be attentive to deadlines

WHICH PROJECT SHOULD I COMPLETE?

NEW APPLICANTS			
Students who have not participated	Choose one pathway for your application project:		
in any ACES teams.	Design & Modeling, Coding/Programming, or		
	Production (Video, Web/Logo Design).		
RETURNING APPLICANTS			
Students who have participated in an	d in an 250 word essay about your contributions to		
ACES team or competition before. the ACES team this school year. (Be sure to reference			
	the topics in the "General Questions" section.		

Project: Penny Launcher

Build: Design and build a projectile launcher. Your launcher must meet the following criteria:

- Launch a penny 7 feet
- Accurately hit a target (circle on the floor with center 7 feet away.)
- Be contained in a 15" x 15" cube
- Use only the materials allotted. You do not have to use all materials. You are not limited in the quantity of any material.
 - o pencils
 - o popsicle stick (any size)
 - o balsa wood or similar
 - o tape (any kind)
 - o glue(any kind)
 - string rope or paracord
- o plastic or metal bottle caps
- shoe box or tissue boxpaper clips
- o paper (
- binder clips
 any paper, plastic, cardboard
- CDs or DVDsSponge

straws

0

- Spongerubber band
- o plastic utensil

string, rope, or paracord

Documentation: Respond to the following questions and instructions in complete sentences (as it applies). You should demonstrate your ability to communicate your reasoning and how you used the engineering design process.

- 1. Insert an engineering drawing of your launcher on graph paper. You should have a front, side, and top and isometric views. Include measurements and labels. You may complete the drawing by hand or on Onshape.
- 2. Describe the design of your launcher and why you made the decisions you did. Discuss significant design decisions in depth.
- 3. Describe how you applied each step of the engineering design process. Be detailed and use examples.
- 4. Evaluating your design is an important part of improving. Include a table that measures the accuracy of your build and document multiple tests conducted over time. Describe how you used this data to help you evaluate and improve your design.
- 5. If you were to redesign your launcher, what would you change and why?

Video: Include a short video demonstration of your build. Your video should be less than 45 seconds and should show your penny launcher working (or an attempt if it does not work). Include any relevant information the viewer should know about how to make your penny launcher work.

Penny Launcher Submission Checklist

- **Build:** Submit your project with your name clearly visible on the build submission.
- Documentation: Submit your printed portfolio in a report cover with your application cover letter as the first page. Please put your portfolio in order of the rubric items. Include the rubric (this page) as the second page.
- Video: Submit video on a flash drive, sharing on Google Drive, or email to <u>DentonACES@mcpss.com</u>. If you do not receive an email response confirming your submission, the video has not been received and you will not earn any points for it. Videos will not be accepted late due to technical complications.

Penny Launcher S			1	Γ
	Exceeds	Proficient	Needs work	Missing
Build	Build works and construction is sturdy.	Build works, but construction is not sturdy.	Build works, but construction is flimsy.	Build doesn't work.
Overall Portfolio and grammar/spelling	Portfolio is complete and free of grammar mistakes.	Portfolio is complete. Grammar mistakes do not take away from understanding.	Portfolio is complete. Grammar mistakes negatively impact understanding of content.	Portfolio is incomplete or grammar is very poor throughout.
General Questions	Applicant answered the questions.			Did not answer the questions.
Engineering Drawing	The drawing is clear. The drawing has multiple views, measurements, scales, and labels.	The drawing is clear. The drawing may be lacking in one area: labels, views, or measurements.	The drawing is missing a lot of information.	There is no drawing provided.
Description and explanation of design	The description is thorough and addresses all the features of the launcher.	The description is thorough and addresses most of the features of the launcher.	The description is broad and the features of the launcher are not addressed.	There is no description provided.
Application of engineering process	The student addresses all aspects of the EDP with meaningful and relevant answers.	The student addresses all aspects of the EDP with somewhat meaningful/relevant answers.	The student addresses most aspects of the EDP with few details or relevance to the project.	The EDP is not referenced in a meaningful way.
Evaluation of Design	The table documents design improvements. Information from the table is used to design improvements. Reasoning is scientific, thorough, and meaningful.	The table documents design improvements Information from the table is used to design improvements. Reasoning is mostly reflected in the results.	The table documents design improvements. Information from the table is used to design improvements. Reasoning is loosely reflected in the results.	There table is poorly constructed or has missing information. OR The student does not use as evidence to describe improvements. OR Reasoning is not reflected in the results.
Redesign of Launcher	The student makes note of a redesign with reasonable explanations.	The student makes note of a redesign with a somewhat clear explanation.	The applicant makes note of a redesign without explaining the need for it.	There are no redesigns or there is a redesign with no meaningful explanation.
Video Build Demo	The build is successfully demonstrated multiple times.	The build is successfully demonstrated once.	The build is demonstrated, but not successful.	The video is missing or does not demonstrate the build.
Understanding of Commitment	Applicant exhibits full understanding of commitment and an eagerness to complete responsibilities.	Applicant exhibits some understanding of the commitment and will likely be able to complete responsibilities.	Applicant does not seem to fully understand the commitment required to the ACES Program.	Applicant seems unlikely to succeed in the ACES program along with their full course load of classes at DMST.

Penny Launcher Submission Rubric

Project: Graphic Arts Logo

Directions

It is important that we give back to our community. You are going to select a cause that you are interested in or passionate about and create an identity package for the business, organization, or service. You may use any technology tools including, but not limited to, Microsoft Publisher, Canva, Adobe Illustrator, Photopea, and/or Photoshop. You will create the following items in your identity package:

- 1. Logo Design
- 2. Poster
- 3. T-shirt

Each one of the items that you create must follow the elements of art and principals of design:

Elements of Art: Line, Color, Shape, Form, Value, Space, and Texture.

Principles of Design: Balance, Repetition, Contrast, Emphasis, Scale, and Unity.

1. Logo Design

Required Elements

- The idea is to find the perfect image to personify an organization's values, services, and mission.
- Include brand name, graphic image, and slogan.
- Submit a color version of your logo.
- Choose a color palette with only 3 4 colors. Hex codes for each color must be provided in your documentation. Color palettes must be chosen from one of the following color harmonies:
 - Analogous colors Colors that are right next to one another on the color wheel that results in a low contrast harmony.
 - Monochromatic colors Dark, medium, and light versions of the same color.
 - Complimentary colors Colors that are on the opposite side of the color wheel that creates the most contrast.

Design Principles

- The brand name is most important. Use font size and colors to apply visual hierarchy to your design.
- Simple designs are recognizable. Use color and purposefully chosen fonts to make your logo highly visible.
- Consider the relative sizes of your design elements and white space or negative space between them to ensure that your final product is not over crowded.

2. Poster

Required Elements

- A poster design is about the impact that makes on others. You want to inspire interest and action based on what is presented on the poster.
- Width: 8.5 inches
- Height: 11 inches
- Resolution: 150 (dpi = dots per inch)
- Colour: RBG
- Background: white (or transparent)

- Include brand name, graphic image, and slogan.
- Choose a color palette from the following harmonies: Analogous colors, Monochromatic colors, and/or Complimentary colors.
- The Hex codes for each color must be provided in your documentation.
- Create and design your poster using the Elements of Art and Principles of Design.

3. T-shirt

Required Elements

- Include brand name, graphic image, and slogan.
- Create and design your t-shirt using the Elements of Art and Principles of Design
- Choose a color palette with only 1 3 colors.
- The Hex codes for each color must be provided in your documentation.
- Choose a color palette from the following harmonies: Analogous colors, Monochromatic colors, and/or Complimentary colors.

Supplemental Questions

Type the response to the following questions in complete sentences. You should demonstrate your ability to communicate your reasoning and how you used the engineering the design process for this project.

- 1. Why did you select this business, organization, or service to create your project?
- 2. What is the meaning or purpose behind this business, organization, or service?
- 3. Insert a table with the hex codes for the logo, poster, and t-shirt design.

Item	Hex Code(s)
Logo	
Poster	
T-shirt	

4. What other products could you design to advertise your chosen business, organization, or service?

Graphic Arts Submission Checklist

- □ **Logo**: Submit a digital copy of your logo. Email to <u>DentonACES@mcpss.com</u>.
- □ **Poster:** Submit a digital copy of your poster. Email to <u>DentonACES@mcpss.com</u>.
- □ **T-shirt design:** Submit a digital copy of your t-shirt design. Email to <u>DentonACES@mcpss.com</u>.
- Documentation: Submit your printed portfolio in a report cover with your application cover letter as the first page.
 Put your portfolio in order of the rubric items. Include the rubric as the second page. Make sure that you include a printed color copy of your logo, poster, and t-shirt design.

Graphic Arts Submission Rubric

	Exceeds	Proficient	Needs Work	Missing
	Drain at month and	Due is et an e ete	Ducient mente	Draiaatia
Overall Identity Package	Project meets and exceeds	Project meets	Project meets minimal	Project is incomplete and
Package		requirements.	-	missing major
	requirements.		requirements.	elements.
Logo	All required	All required	All required	Missing required
	elements are	elements are	elements are	elements or
	included.	included.	included, but the	elements do not
	They support	The brand	brand promise is	communicate a
	communication of	promise is mostly	poorly	brand promise.
	the brand	communicated	communicated or	
	promise.	through the logo.	confusing.	
Poster	Visual hierarchy,	Visual hierarchy,	Design principles	The design
	white space, size	white space, size	are present, but	principles are not
	and color are	and color	are only loosely	used successfully.
	used purposefully	communicate a	connected to a	
	to communicate	brand promise	brand promise.	
	the brand	somewhat		
	promise.	successfully.		
T-Shirt Design	The message on	The message on	The message on	The message on
0	the t-shirt is bold	the t-shirt is clear	the t-shirt is clear,	the t-shirt is
	and compelling.	and compelling.	but fails to go	absent or slightly
	Fonts and effects	Typography	beyond	confusing. The
	help create a	choices area	something simple	font choices
	strong visually	appropriate	or obvious.	create
	connection with	without an	Typography is	distractions and
	the work. All font	excessive number	generally	weaken the work
	sizes are	of fonts or effects.	effective,	in dramatic ways.
	appropriate.	Work may have	although the font	Imperfections are
	Work has no	slight	choice, size, and	highly distracting
	evident	imperfections, but	effects may create	and take away
	imperfection.	they are not	minor	from the overall
	Work is clean and	immediately	distractions.	effectiveness.
	neat.	obvious.		
Overall Portfolio	Portfolio is	Portfolio is	Portfolio is	Portfolio is
and grammar and	complete and free	complete.	complete.	incomplete or
spelling	of grammar	Grammar	Grammar	grammar is very
	mistakes.	mistakes do not	mistakes	poor throughout.
		take away from	negatively impact	
		understanding.	understanding of	
			content.	

Coding Project (Animation/Digital Game)

This category allows students to develop an original project with the primary purpose for allowing the motion of digital objects or the creation of an interactive game with rules and a purpose. You may use programs like Paint, Photoshop, Illustrator, Corel Draw or freehand drawing on a graphic tablet for Animation. Scratch and Blockly, and Code Play Lab are good options for Digital Game Design.

Build Instructions and Content Requirements

- Use a higher level of creativity throughout the design process and written presentation.
- Make sure that you provide instructions to use your project as intended that are clear and concise with correct spelling and grammar within the digital project.
- Demonstrate creativity and a solid understanding of the software in development of the project.
- At least one sprite should be an original creation with at least three different positions. You may use prebuilt sprites for your other requirements.
- Use at least five sprites total.
- The project should demonstrate a clear and cohesive message through the interactive and creative components.
- At least twelve user actions (click or button press) should be used to trigger a change in the game.
- The project should include some instructions on the face of the animation or game to explain how the program is used.
- The project should visually give citations for sources & permissions for non-student produced materials.
- Email a link to your digital project to <u>DentonACES@mcpss.com</u>. If you do not receive a reply email stating your submission has been received, then you'll need to follow up to confirm that it has been received.

Documentation Binder/Folder Requirements

- Describe how you applied each step of the engineering design process. Be detailed and use examples.
- Students must submit a short essay describing what inspired their creation. What software they used and how they used the software to create their design. In addition, to include, how they programmed their game to achieve the project goals.
- Animation should include a pencil draft of your artwork and a final, colored draft of your work in your binder.
- Digital Game Design- should include screen shots of views within the game with explanations.
- Include screenshots of your code.
- Animation or Digital Game Design projects should include citations for sources and signed permissions for nonstudent produced materials (ie. music). (Permission/release forms will be provided)
- On your Binder title page add the link to your digital project.
- Answer the General Questions at the end of the Application Packet.

Coding Submission Checklist

- **Code:** Email a link to your digital project to <u>DentonACES@mcpss.com</u>. If you do not receive a reply email stating your submission has been received, then you should follow up to confirm that it has been received.
- Documentation: Submit your printed portfolio in a report cover with your application cover letter as the first page. Please put your portfolio in order of the rubric items. Include the rubric (this page) as the second page.

Coding Project	Exceeds	Proficient	Needs Work	Missing
(Animation/Digital Game)				
Overall Portfolio and grammar/spelling	Portfolio is complete and free of grammar mistakes.	Portfolio is complete. Grammar mistakes do not take away from understanding.	Portfolio is complete. Grammar mistakes negatively impact understanding of content.	Portfolio is incomplete or grammar is very poor throughout.
Project Completion Did student complete the entire project?	Project meets and exceeds requirements.	Project meets requirements.	Project meets minimal requirements.	Project is incomplete and missing major elements.
Creativity Did student use a higher level of creativity throughout the design process and presentation?	Displays a high level of creativity throughout the creation process. Project presentation exceeds required elements.	Displays average creativity of project and presentation.	Displays lower level of creativity of project and presentation.	Minimal levels of creativity within project and presentation.
Purpose Did all parts of the project work together for the intended purpose?	The project meets and exceeds requirements and guidelines consistently and expresses quality work.	The project meets requirements and guidelines consistently.	The project meets minimal requirements with few errors or flaws in the program.	Minimal requirements were met. Errors occurred within the programming and the game/digital art did not perform as intended.
Understanding Did student demonstrate a solid understanding of the software in development of the project?	Student work shows mastery of software used, the process and all elements of the process were explained within the project and in binder/folder.	Student work shows average knowledge of software used and the process. All elements of the process were explained within the project and in binder/folder.	Student work shows minimal knowledge of software used and/or the process. Elements of the process were not explained clearly within the project and/or the binder/folder.	Student work shows very little knowledge of software used, the process or the elements of the process were not explained within the project and in binder/folder.
Documentation Binder/Folder Did the student present and submit all the required documentation in a neat and organized binder/folder?	All required elements of the project submitted. Documents are typed or printed in color when needed and are neat and attractive. Binder/Folder presented in a neat and orderly fashion.	Most required elements of the project submitted. Documents are typed or colored and are neat and attractive. Binder/Folder presented in a neat and orderly fashion.	Some required elements of the project submitted. Documents are typed or colored and are neat and attractive. Binder/Folder is presented, but not as neat or orderly as it could be.	Little to no required elements of the project submitted. Documents are not typed and/or colored, are not neat. Binder/Folder presented but is missing elements.
Digital Content Did the student present their project and how it is to be used in a clear and easy to understand format?	The project demonstrates a high degree of analysis and thought presenting the requirements. The project content covers the requirements in depth.	The digital project demonstrates a thorough and thoughtful overview of the project and successfully presents that in a meaningful and exciting way to his/her audience.	The game/animation demonstrates a general overview of the project and attempts to explain the information to his/her audience.	The game/animation demonstrated a superficial overview of the project and is missing two or more elements.
General Questions	Applicant answered the questions.			Applicant did not answer the questions.

Video Project:

Our National Technology Student Association (TSA) collaborates with American Cancer Society (ACS). Plan a potential fundraising event for our school. Do some research and create a video to talk about the relationship between the two organizations. Possibly, interview someone that you know that has had cancer. Ask about the role that the ACS had in their experience. Promote your potential fundraiser event through your video. Your video will be scored on the content and the production value.

This video project must be an original video project that has been edited on a computer with digital video editing software and exported into a digital video format. The completed project must be displayed for viewing on a computer. The focus of this category is on the editing process, creativity and presentation. Original content used in this kind of project may come from the student or it may be obtained from other permissible sources as long as those sources have provided documented consent.

Video Build Instructions

- Create an original video demonstrating your planning, shooting and editing movie making skills.
- Your video should demonstrate your ability to effectively communicate the partnership between TSA and ACS and successfully promote your plan for a Denton fund raising event to support this cause.
- Your video should include an opening with you introducing yourself as "_____, reporting for DMST-TV" and then sharing your story. Your video should also close with, something like, "thanks for joining us on DMST-TV".
- Your video should include credits citing any attributes to speakers/interviewees/or guest appearances. Your video should include credits for background music, photos, videos, with references to all research used.
- You must receive signed waivers for all those who contribute to the making of your video.
- You must turn in your own work, to include your scripting, storyboarding, reporting, and editing.
- You may use others in your video to add to the content, however, you must gain release forms for those people.
- (Check with Mrs. Molyneux to locate these forms online.)
- Submit a copy of your video to <u>DentonACES@mcpss.com</u> when you submit your application.

Video Production

- Voice levels are loud and clear. Expression is used in voice. There is no background noise.
- Varied angles are used with a purpose. The subject of the video is clearly presented.
- Background is purposefully chosen and there are no visual distractors.
- Transitions, titles, and introductions/credits look natural and professional.
- Some sort of music should be used at the introduction and closure of your video that denotes a news style production.

Time Limits

- The video should be a minimum of 2 minutes, however, should not exceed 4 minutes.
- A deduction of five (5) points will be applied to videos exceeding the time limit.
- The video will be timed from the first sound or picture to the final sound or picture.

Documentation Binder/Presentation Folder (See Mrs. Molyneux for suggested formats and/or forms.)

- Document your project brainstorm ideas.
- Provide a typed script for your video.
- Complete a storyboard (with color) showing the plan for your video with shot types or angle information.
- Document your project progress into a typed daily log.
- Write a short essay to explain your planning process, the programs used, and your editing process.
- Answer the General Questions at the end of the Application Packet.
- Submit your video to DentonACES@mcpss.com when turning in your application.

Video Submission Checklist

- □ **Video:** Email a link to your video to <u>DentonACES@mcpss.com</u>. If you do not receive a reply email stating your submission has been received, then you should follow up to confirm that it has been received.
- Documentation: Submit your printed portfolio in a report cover with your application cover letter as the first page. Please put your portfolio in order of the rubric items. Include the rubric (this page) as the second page.

Video Project	Exceeds	Proficient	Needs Work	Little to No Effort or Missing
Overall Portfolio and grammar/spelling	Portfolio is complete and free of grammar mistakes.	Portfolio is complete. Grammar mistakes do not take away from understanding.	Portfolio is complete. Grammar mistakes negatively impact understanding of content.	Portfolio is incomplete or grammar is very poor throughout.
Video Embedded Documentation Did student include citations for sources & permissions for non- student produced material?	All required citations and permissions are present within the video.	Most of the required documentation is present within the video.	Some of the required documentation is present within the video.	Little to none of the required documentation was present within the video.
Project Completion Did student complete the entire project as assigned?	Video project is complete with an introduction, a clear message, and an ending with credits to include audio effects and musical elements.	Video projects begins and ends abruptly. Projects lacks audio effects or musical elements in certain areas.	Video project includes all elements; however, the message is unclear.	Video project Is incomplete, unedited, or not an original student created video.
Video Content Did the student present the information and project fundraiser as assigned?	The video demonstrates a high degree analysis and thought presenting the requirements. The video content covers requirements in depth.	The video demonstrates a thorough and thoughtful overview of the project and successfully presents that in a meaningful and exciting way to his/her audience.	The video demonstrates a general overview of the project and attempts to explain the information to his/her audience.	The video demonstrated a superficial overview of the project and is missing two or more elements.
Creativity Did the student use a higher level of creativity throughout the design process and presentation?	Displays a high level of creativity throughout the creation of the video project and the video presentation.	Displays average creativity in the creation of the video project and video presentation.	Displays lower level of creativity in the creation of the video project and video presentation.	Minimal levels of creativity shown in the creation of the video project and video presentation.
Video Production (Scored from video and assigned short essay) Did the student demonstrate a solid understanding of the software in development of the project?	Student work shows mastery of software used, the process and can explain all edits to enhance the project. Mastery of the software.	Student work shows a good working knowledge and understanding of the software used, the process, and somewhat explains the editing process.	Student work shows an average understanding of the software used and the process but does not explain the editing process thoroughly.	Student displays little to no understanding of the software used to create the project and the essay does not explain the editing process.
Purpose Did all parts of the video project work together for the intended purpose?	Audio and video are smooth with perfect transitions that enhance the project. Audio is consistent, expresses quality work and is properly synchronized with the video. The edits are clean and effective.	Most elements are included. The audio and video are smooth with transitions. Minor issues such as background noise, sound level problems or shaky video.	Some elements are unnecessary or missing. Minor issues such as background noise, sound level problems or shaky video.	Little to none of the elements of the video fit the purpose of the project.
Documentation Binder/Folder Did the student present and submit all the required documentation in a neat and organized binder/folder?	All required elements of the project submitted to include, the brainstorm sheet, script, colored storyboard, progress log, citations, permission sheets, and essay. Documents are typed or colored when needed and are neat and attractive. Binder/Folder presented in a neat and orderly fashion.	Most required elements of the project submitted. Documents are typed or colored and are neat and attractive. Binder/Folder presented in a neat and orderly fashion.	Some required elements of the project submitted. Documents are typed or colored and are neat and attractive. Binder/Folder is presented, but not as neat or orderly as it could be.	Little to no required elements of the project submitted. Documents are not typed and/or colored, are not neat. Binder/Folder presented but is missing elements.
General Questions	Applicant answered the questions			Applicant did not answer the questions.

General Questions for New Applicants

Directions: These questions should be turned in with all application portfolios to DentonACES@mcpss.com.

- 1. What pathway(s) do you hope to take on the Denton ACES Competition Team?
- 2. What projects do you hope to complete for the ACES Team? (Use the competition websites listed in this appl
- 3. How do you plan to contribute to the Fall and Spring STEM Fair next year? (This event is held at Denton to showcase student work done throughout the year.)
- 4. What extracurricular or after school responsibilities do you plan on taking on next year? How do you plan to balance these with your ACES responsibilities?
- 5. Though some of our competitions are at the end of the year, students should still begin working on their projects for in August. What steps will you take to ensure that you have fully completed your projects before heading to the competition?
- 6. Write a response to the quote describing what it means to you.

"Embrace every opportunity to be reflective, ethical, trustworthy, decisive, confident, optimistic, flexible, and innovative. ... Accept the challenge to do things that support your goals. Communicate, motivate others, advocate for yourself and others, solve problems, think critically, think creatively, act with integrity, serve others, and be a lifelong learner."

General Questions for Returning Applicants

- 1. What role did you play on the Denton ACSE team last year? List one area where you excelled and one area where you need to improve.
- 2. What projects did you complete for ACES this year? What projects do you hope to complete for ACES next year?
- 3. What extracurricular activities do you plan on taking on next year? How do you plan to balance these with your ACES responsibilities?
- 4. Though some of our competitions are at the end of the year, students should still begin working on their projects for in August. What steps will you take to ensure that you have fully completed your projects before heading to the competition?
- 5. Write a response to the quote describing what it means to you. "Embrace every opportunity to be reflective, ethical, trustworthy, decisive, confident, optimistic, flexible, and innovative. ... Accept the challenge to do things that support your goals. Communicate, motivate others, advocate for yourself and others, solve problems, think critically, think creatively, act with integrity, serve others, and be a lifelong learner."

ACES STUDENT APPLICATION COVER LETTER

Student Name:
Student Grade Level (for 2021 - 2022 school year):
Submission Date:
Project Selection:

Competitions:

What are your interests? Choose ALL that apply.

- O Building/Robotics
- O Programming/Coding
- O Graphic Arts/Design
- O Video/Photography
- O Other: _____

To be filled out by a parent/guardian.

O I have fully read the information in this packet and understand the requirements of the ACES Program.

Guardian Name: ______

Guardian Email: _____

Guardian Phone: _____

NOTE: It is the responsibility of the ACES student member to keep up with all ACES communication. We have a student Schoology Group where all materials and meeting videos will be placed for student access. Students will need to keep their parents informed about their projects, due dates, forms, and monies due.