

# INFO PACKET FY21-22



**EDUCATE EMPOWER ELEVATE**

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Sponsored by:





**Josh Bixler**  
Creator of Flite Test

"Flite Test was created for people passionate about flight. They are the dreamers and engineers that get a thrill from the first launch of a maiden flight. Flite Test will personify the veteran and the beginner alike giving them a chance to share common experiences with others, in turn, enhancing the RC community. The goal is to develop a creative outlet that allows us to work in our passion daily. Flite Test is designed to empower our audience and we hope to entertain, educate, and elevate our viewers as we move forward with quality content."



**FLITE TEST STEM**

FT STEM is the gateway to the world of flight. Our K-12 curriculum teaches science, technology, engineering and math (STEM) principles through hands-on aircraft activities. FT STEM stresses critical 21st-century skills such as communication and teamwork developed through engineering and design thinking strategies. The world of radio-controlled (R/C) flight teaches valuable lessons that generate excitement, innovation and creativity, empowering students to reach new heights in their learning.

## OUR CORE VALUES



### COMMUNITY

The Flite Test platform has always made it priority number one to promote and bridge the hobbyist and education communities through DIY scratch build aviation. Our curriculum is a reflection of what Flite Test is, and that is flight is for everyone.

### DESIGN THINKING

We want our students and teachers to think for themselves, be creative, be a problem solver, be a critical thinker, and develop grit while doing it. Our curriculum fosters original thought and the process of how to solving a problem through the lens of aviation.

### TAKING FLIGHT

Careers in aviation are growing, from mechanics to pilots and the emergence of UAS technologies. We hope that our curriculum and passion around remote control STEM scratch build aviation will provide the necessary spark that influences our next generation.

### OUR MISSION

Is to provide a hands-on STEM, scratch-build, remote control educational opportunity that empowers educators and students to elevate their passion and growth in the field of aviation.

Over 3,000 enrolled FT STEM students utilize our engineering design model and associated FT products that blends all four STEM content areas into one, building skills needed for real-world problem solving.



Over 1,500 enrolled FT STEM Teachers have access to an interactive online hangar that provides the ability to create and manage unlimited classrooms and students, as well as grade level lessons and a lesson developer to create their own.

### OUR CURRICULUM

Our curriculum and associated content materials are easily scalable for traditional classroom settings and for remote learning applications. With the focus on independent and small group learning, the curriculum is well-suited for home-centered education settings with a few students or students at various levels. Especially with levels K-8, FT STEM provides guidance for leaders with broad ranges of DIY and teaching proficiency by encouraging shared building and flying experiences that just might be fun for everyone.



# OUR RESOURCES



## PROGRAMMING

Stand alone classes are becoming harder to come by as school districts look for a stronger end product when it comes to developing out programs. Having a clearly defined pathway for students can strengthen participation, increase enrollment, and push for a more rigorous curriculum. With our K-12 curriculum, school districts have the opportunity to easily map out a comprehensive Drone Tech Pathway for their students, preparing them for a variety of fields in engineering and STEM jobs of the future.

Possible district example for a UAS (Unmanned Aerial Systems) Pathway  
Note: Name of courses are suggested and not official course identifiers.

### UAS Discovery (Elementary)

- Entry level aeronautical program learning about the basics of flight, drone ethics, and beginning level engineering.

### UAS Intro to Engineering (Middle School)

- Utilizing fabrication lab equipment and CAD software, students will learn about taking an idea and making it a reality by student led research, design, create, and testing of entry level UAS platforms.

### UAS Safety, Law, and Application (High School)

- Students will engage in industry level content and application, engineering and operating UAS platforms for a purpose and earning an industry FAA Part 107 Certification. CTE Credited!

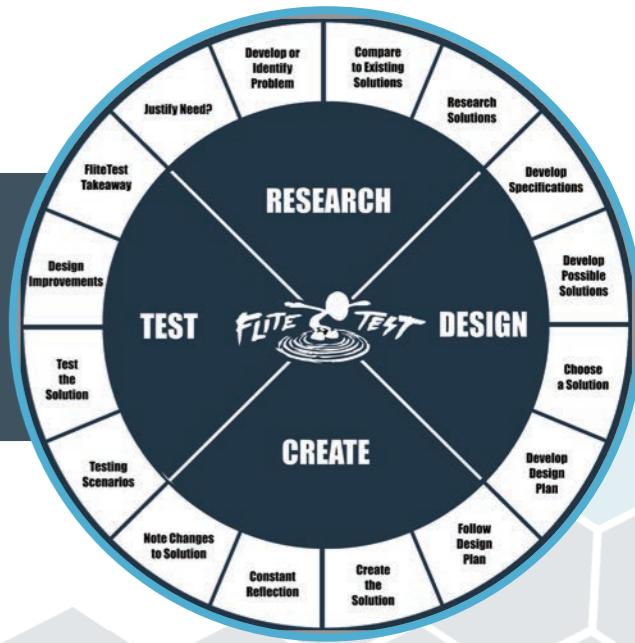
# DESIGN THINKING

Design, or the "The Process," as Flite Test calls it, is the foundation of the development of new technologies. Design is the driving force that forms our societies, and it guides how we see and process information, adapt to our surroundings, communicate and solve problems. The design process leads us to plan, create and test as we push for constant progression in the workings of our lives. Flite Test design requires the use of the FT-Engineering Design Model (FT-EDM) as a tool, which provides the approach used to structure the research and analysis of problems, the development of possible solutions, creation, and the testing and evaluation of the solution. See our design models below;



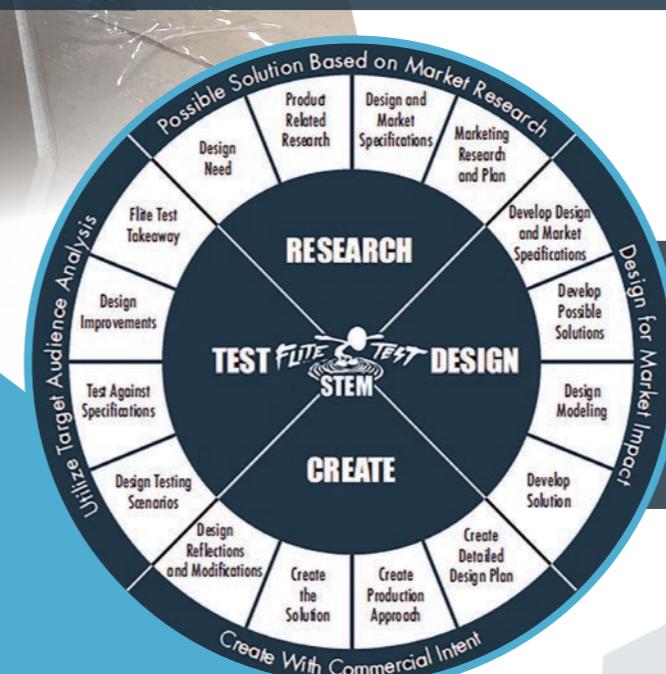
## PROJECT EZ LEVELS K-8

Students focus on basic usage of the four FT-EDM stages, creating simple problems to use the process to develop a solution.



## MIDDLE SCHOOL LEVELS 6-8

Students use extended FT-EDM procedures within their FT STEM online Design Brief, incorporating CAD drawings, project pictures and videos, and an in-depth final solution reflection.



## HIGH SCHOOL LEVELS 9-12

Unlike the Elementary and Middle School level FT-EDMs, the HS FT-EDM incorporates the market lens and its influence on the product and how it should be designed.

# CUSTOMER TESTIMONIALS

"Flite Test, along with their staff are making instructional lessons in flight not only accessible but also teacher friendly. Their commitment to providing educational resources to those interested in flight is unparalleled, and their professional development for STEM teachers is top-notch. They are all great teachers of aeronautic technology, and best of all, they are students of flight technology as well as learning all they can to make the world of flight more available to other students."

Bradley Mueller  
STEM Teacher  
St. Louis University High School

"The FT STEM program has done so much for me in the past years. This program is what has driven me to pursue aerospace engineering. Beginning with the middle school program, and now finishing with the high school program has been so much fun. The opportunities I have been given from FT STEM have been ones I will never forget. From helping kids build their own planes, to being invited to a police/SWAT training for my senior project. It has prepared me for college level and now Lockheed Martin."

Danny Liebert  
Former FT STEM Student  
University of Colorado Boulder  
Project Engineer at Lockheed Martin

"FT STEM allowed me to see how we can bring the most advanced technologies and sciences, and simplify it to something that younger kids can learn about math, physics, and forms of engineering, as well as leadership skills, such as teaching someone to fly or build. Building foam airplanes also taught me that everything takes practice, and time to learn. The growth from my first plane to my next taught me to keep at what you love to do, no matter how many failures you encounter. FT STEM taught me that failure doesn't mean the end, just another opportunity to improve and learn."

Scott Bragg  
Former FT STEM Student  
Embry Riddle  
Garmin Avionics

"FT STEM utilizes a process that integrates engineering models with design thinking allowing students to learn and practice twenty-first century executive and STEM skills essential for student success after high school. Teachers taking flight gave me further insight into the depth of Flite Test STEM program and community, which is deeper than I imagined."

Scott Cary  
STEM Teacher Grades 6-12  
Seattle Washington

The Flite Test product line integrates easily within the FT STEM curriculum. Enrolled teachers receive our STEM discounts on DIY airplanes, equipment, and curriculum accessories. Below are our complete signature products with curriculum connections supporting a single group of students. Simply multiply to outfit your ideal classroom materials to student needs. For more information please see [store.ftstem.com](http://store.ftstem.com) or email at [support@ftstem.com](mailto:support@ftstem.com) and get up to date quotes on how to scale this material to your classroom or home-centered environment.

## FT STEM ONLINE \$99.00/Year

Supports 1 Educator  
Great for home and public school operations. Over 80 lessons K-12 to design your ideal classroom experience. See our curriculum overviews and start a trial today!

## PROJECT EZ \$99.00

Supports 2-3 Students  
Ideal for grades K-8, package supplies everything you need and a FREE curriculum download with fun activities lasting up to 6 weeks. See our entire Project EZ curricula for an all year experience.

## STARTER BUNDLES

\$450.00 Supports 2 Students

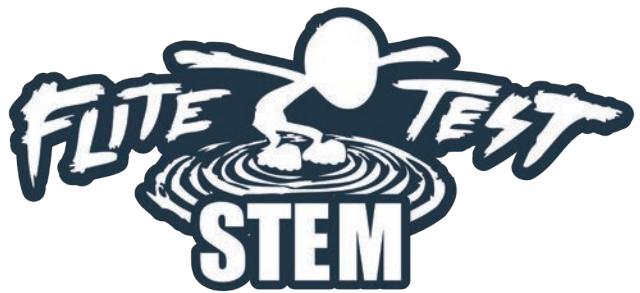
Ideal for grades 6-12, package supplies everything you need for the students to build, follow assigned lesson using FT STEM.com, fly, redesign, and fly again! See our online FT STEM curriculum and develop a unit using our training bundles.

## CLASSROOM/CAMP BUNDLES \$Call For Pricing 25 to 50 Students

Need support and the best pricing to outfit your classroom or camp needs, please contact [support@ftstem.com](mailto:support@ftstem.com) and begin planning with our education team. Purchasing this bundle will provide up to 3 educators FREE access to our online curriculum allowing for NO LIMIT student enrollment.

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