Spring 2026 Course Catalogue

Introduction

"We Are Upping Our Game... Yet Lowering Our Class Costs!"

Welcome to the **NovaEd AeroLab Spring 2026 Course Catalogue**, where we bring a new level of clarity, structure, and affordability to our aerospace education programs**.** This catalogue includes all class descriptions, locations, schedules, tuition details, and flight-show dates for both our **Corona** and **Tustin** campuses**.**

We listened carefully to every piece of feedback from parents and students — and we improved **everything.**

Program Levels

To ensure proper placement and an age-appropriate learning experience, we structured our courses into three clear levels:

- **Level 1:** Grades **1–4**
- **Level 2:** Grades **5–8**
- **Level 3:** Grades **9–12**

Each level gradually builds engineering competence through hands-on projects, experimentation, and real-world aerospace applications.

Modules A–D: Four Branches of Aerospace

Our curriculum is organized into four modules, each covering a distinct area of aerospace engineering:

- **Module A – Introductory (Glide Flight Engineering)**
  Building and testing gliders, learning forces of flight, stability, and fundamentals.
- **Module B – Rocketry & Space**
  Propulsion, rocketry, space vehicles, and orbital concepts.
- **Module C – Intermediate/Advanced Engineering Concepts**
  Micro-airplanes, engineering analysis, deeper aerodynamics, loads, and structures.
- **Module D – Most Advanced (RC Aircraft & Systems)**
  Full design-build-fly RC projects, systems integration, electronics, propulsion, and advanced aerodynamics.

What's New for 2026

We have significantly enhanced both the learning structure and the student experience:

- **Classes are now 6 sessions instead of 8**, keeping all the core content but lowering the cost.
- **Start date, end date, time, days off, and Flight Show Day** are clearly listed for every class.
- **All prices have been automatically reduced**, and an additional **25% Early-Bird Discount** is active **until further notice.**
- **We learned from previous classes and parent feedback** — clearer communication, better pacing, and improved project planning across all levels.

Student Learning Materials & Communication

- **All registered students will receive a week-by-week summary** of the class content:
  what will be taught, what will be built, and what to expect each week.
- If any **home work** or at-home preparation is required, it will be communicated **in advance.**
- A clear **Make-Up Policy** will be announced at the first session to ensure transparency and fairness.

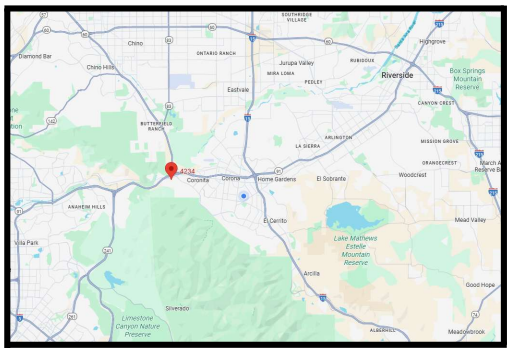
Sibling Discounts

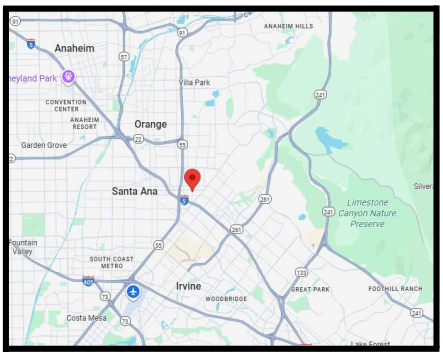
To support families, we added generous multi-child discounts — **on top of** the 25% Early-Bird Discount:

- **2nd child:** 15% off
- **3rd child:** 20% off
- **4th child:** 25% off

Discounts are applied based on the **cart average**, making it easy and automatic.

Locations





- **Corona:** 4234 Green River Rd, Corona, CA 92880
- **Tustin:** 155 El Camino Real, Tustin, CA 92870

Each class page specifies which campus offers that course.

How to Register

- **General Registration:**
  Visit our website or contact us using the information on each class page.

(If you click on the title of the class you are interested in, it will take you to that class on our website)

- **Homeschooling Families:**
  All classes are **homeschool eligible.**
  Go to **Masrahs.org** to register, confirm if your charter school is supported, and view charter-specific pricing.

Each class page indicates whether that program is offered in one or both locations.

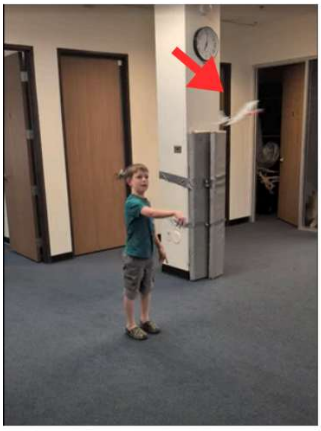
Registration

- **General Registration:** Visit our website or contact us directly using the information on each class page.

- **Homeschooling Families:**
  All classes are **homeschool eligible.** Please visit **Masrahs.org** to register, verify if your charter school is already an approved vendor, and view charter-school-specific pricing.

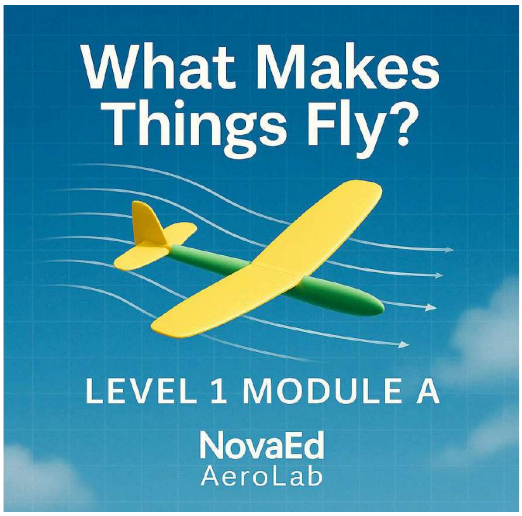
We look forward to welcoming your students into an exciting semester of exploration, discovery, and real-world aerospace engineering!

Note: Discounted prices are subject to change without notice.



Course 1A: What Makes Things Fly?

Grade Level: 1-4



Campus Options: Corona & Tustin

Days / Times

Corona- Mondays 4:00-5:30 pm Jan-12 to Feb-23

Days off: 1/19, 2/16

Tustin- Wednesdays 3:45-5:15 pm Jan-14 to Feb-11

Days off: None

Flight Show Day:

Corona- Sunday Mar-1

Tustin- Sunday Feb-22

Tuition – Tustin: Full price $530 **|** Discounted price $397.50

Tuition – Corona: Full price $500 **|** Discounted price $375

Description / Summary:

Discover the Wonders of Flight

Ignite a passion for science and creativity among young learners with our engaging flight experiment module. Perfect for introducing students to fundamental physical forces like lift, drag, gravity, and air resistance, this educational kit pairs science with fun. Designed to challenge students' problem-solving skills and creativity, these hands-on activities create an unforgettable learning experience that captures attention and inspires curiosity.

Interactive Activities That Bring Concepts to Life

With week-by-week activities, students will dive headfirst into understanding how flight works. From building straw gliders and folding intricate paper airplanes to analyzing the effects of various wing shapes on motion and stability, every exercise is thoughtfully crafted to be age-appropriate and impactful. Additional experiments include balloon-powered propulsion and parachute designs that illustrate complex concepts like air resistance and gravity in a simple, visually appealing way. These dynamic activities ensure learners remain excited, engaged, and eager to explore.

Celebrate Learning with a Mini Airshow

The module concludes with an extraordinary showcase—a mini airshow where students proudly present their unique flight models. Be it a cleverly engineered paper airplane or a creatively customized straw glider, each child celebrates their newfound understanding of flight through experimentation and imagination. This final activity not only fosters teamwork and confidence but also solidifies classroom learning in a fun and rewarding way.

Course 2A: Aerodynamics & Flight Engineering

Grade Level: 5-8

Campus Options: Corona & Tustin

Days / Times

Corona- Mondays 5:30-7:00 pm Jan-12 to Feb-23

Days off: 1/19, 2/16

Tustin- Wednesdays 5:15-6:45 pm Jan-14 to Feb-11

Days off: None

Flight Show Day:

Corona- Sunday Mar-1

Tustin- Sunday Feb-22

Tuition – Tustin: Full price $600 **|** Discounted price $450

Tuition – Corona: Full price $560 **|** Discounted price $420

Description / Summary:

Unleash Your Inner Engineer

Dive into the captivating world of aerodynamics and discover the intricacies of flight mechanics with this immersive learning module. Perfect for curious minds eager to grasp real-world principles of aviation, this program offers an action-packed journey into the fundamentals of lift, drag, thrust, and weight. Whether you're designing foam airplanes or exploring airflow dynamics, each project is carefully crafted to make science both accessible and exciting.

Learn by Doing: Experience Engineering Firsthand

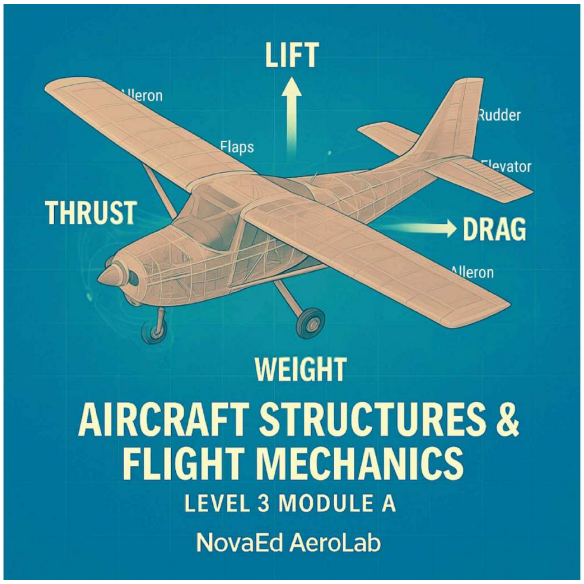
This module consists of six interactive sessions, guiding learners through engaging activities that transform theoretical insights into practical applications. Participants will experience the satisfaction of crafting and refining gliders while exploring how control surfaces such as rudders and elevators improve maneuverability and stability. Experiment with balance, optimize flight performance, and develop a deeper understanding of the technical processes behind modern aviation.

Build Confidence Through Analysis and Teamwork

At every stage of this program, learners will be encouraged to embrace iterative design principles and collaborative problem-solving. The process of testing prototypes, identifying improvements, and implementing changes creates an environment where every participant can build confidence and critical thinking. By the conclusion of this module, students will have honed both technical skills and creative expertise, while gaining valuable insight into the engineering logic that powers flight mechanics in the real world. This module offers a unique learning experience, sparking curiosity and empowering the engineers of tomorro

Course 3A: Aircraft Structures & Flight Mechanics

Grade Level: 9-12



Campus Options: Corona & Tustin

Days / Times

Corona- Saturdays 8:15-9:45 am Jan-12 to Feb-14

Days off: None

Tustin- Tuesdays 4:00-5:30 pm Jan-13 to Feb-22

Days off: None

Flight Show Day:

Corona- Sunday Mar-1

Tustin- Sunday Feb-22

Tuition – Tustin: Full price $720 **|** Discounted price $540

Tuition – Corona: Full price $660 **|** Discounted price $495

Description / Summary:

Discover the World of Modern Aviation Engineering

Step into the fascinating realm of aerospace engineering with this comprehensive course designed to ignite your passion for flight dynamics and structural integrity. Learn the principles that govern modern aviation, from optimizing lift-to-drag ratios to enhancing material performance for aircraft safety. Whether you're an aspiring engineer, pilot, or STEM enthusiast, this program serves as your launchpad to innovative ideas and practical solutions.

Hands-On Learning with Real-World Applications

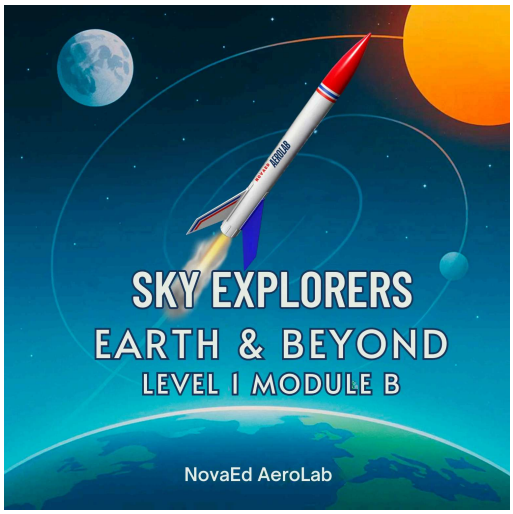
Experience the thrill of learning through guided experiments and simulation-based challenges that make aerospace engineering approachable and exciting. Dive into topics like geometry, weight distribution, and airflow dynamics to understand the science behind aircraft performance and safety. Through model-building exercises using foam, balsa wood, and digital modeling tools, you'll learn how to turn theoretical concepts into tangible designs. Our practical approach ensures that students gain not just knowledge but also valuable skills in critical thinking and problem-solving.

Prepare for a Career in Aerospace Disciplines

This course provides an excellent foundation for anyone interested in deepening their understanding of aerospace disciplines. The module blends creativity with precision, enabling participants to handle stress analysis and aerodynamic testing with confidence.

Course 1B: Sky Explorers: Earth & Beyond

Grade Level: 1-4



Campus Options: Corona

Days / Times

Mondays 4:00-5:30 pm Mar-23 to Apr-27

Days off: Mar-30

Flight Show Day:

Sunday May-10

Tuition – Corona: Full price $500 | Discounted price $375

Notes:

Tentatively: Tustin: Sundays 9:00-10:30 am Jan 18 – February 15 + Flight Show Sunday Feb. 22.

Full price $530 | Discounted price $132.33 (Downpayment)

Offered price for Tustin is only for downpayment and represents 1/3 of the total amount. When Class is confirmed, parents are required to pay the remaining amount. If the Class is cancelled, a full refund will be issued.

Description / Summary:

Dive Into the Mysteries of Space

Take flight beyond Earth with our engaging and interactive space science module—a program designed to captivate young minds and nurture curiosity. This educational experience unravels the wonders of astronomy, gravity, and motion, bringing the marvels of space exploration into the classroom or home environment. Ideal for students who are eager to learn and discover, this module introduces essential scientific concepts that shape our understanding of the universe.

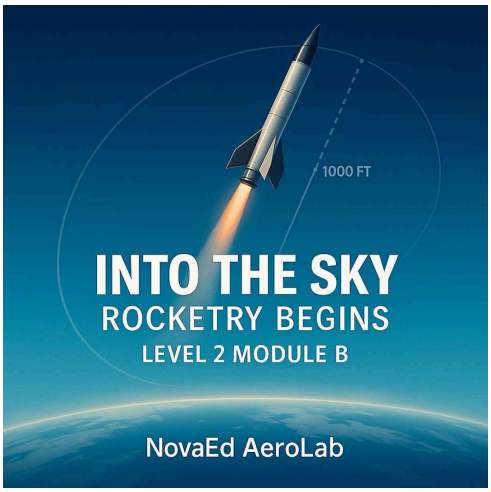
Hands-On Learning Meets Creativity

What sets this module apart is its immersive, hands-on approach. From building scale models of the solar system to designing shuttle prototypes and testing mini rocket launches, students actively engage in creative projects that merge scientific principles with imaginative storytelling. These activities not only make learning entertaining but also create memorable experiences that reinforce lessons in a tangible way.

Embark on a Journey of Discovery

By the end of the module, participants will have the chance to showcase their learnings through a space-themed presentation. This culminating experience lets children share their cosmic creations, be it their uniquely modeled planets, rocket innovations, or collaborative space stories. Promoting both teamwork and individuality, the showcase celebrates achievements while highlighting the beauty and challenges of space exploration.

Course 2B: Into the Sky: Rocketry Begins



Grade Level: 5-8

Campus Options: Corona

Days / Times

Mondays 5:30-7:00 pm Mar-23 to Apr-27

Days off: Mar-30

Flight Show Day:

Sunday May-10

Tuition – Corona: Full price $560 | Discounted price $420

Notes:

Tentatively: Tustin: Sundays 10:30-12:00 pm Jan-18 to Feb-15 + Flight Show Sunday Feb. 22

Full price $600 | Discounted price $150 (Downpayment)

Offered price for Tustin is only for downpayment and represents 1/3 of the total amount. When Class is confirmed, parents are required to pay the remaining amount. If the Class is cancelled, a full refund will be issued.

Description / Summary:

Unleash the Explorer Within

Embark on an exhilarating journey into the world of rocketry—where science meets adventure! This program is designed to inspire curiosity, creativity, and innovation as participants take their first steps into aerospace exploration. Packed with engaging, hands-on activities, learners will dive deeply into STEM concepts, including physics, engineering, and aerodynamics, to create their very own rockets.

Hands-On Rocket Building and Learning

Through this exciting program, students master fundamental concepts like the laws of motion, thrust, balance, stability, and propulsion efficiency. The rocket-building process begins with safe classroom models such as stomp rockets and water-powered designs, ensuring an accessible, interactive learning experience.

Guided by expert supervision, participants refine their designs to achieve higher altitudes and enhanced precision, fostering scientific understanding and practical problem-solving skills.

An Unforgettable Experience

This immersive program culminates in live rocket launch days, where learners witness the thrill of their creations taking flight. Coupled with detailed data review sessions, participants analyze results and apply engineering principles to further optimize their designs. This combination of hands-on experimentation, teamwork, and real-world application makes the program a truly unforgettable experience. Ignite the spark of discovery today and take the mission to launch new possibilities.

Course 3B: Rocket Engineering 101

Grade Level: 9-12

Campus Options: Corona

Days / Times

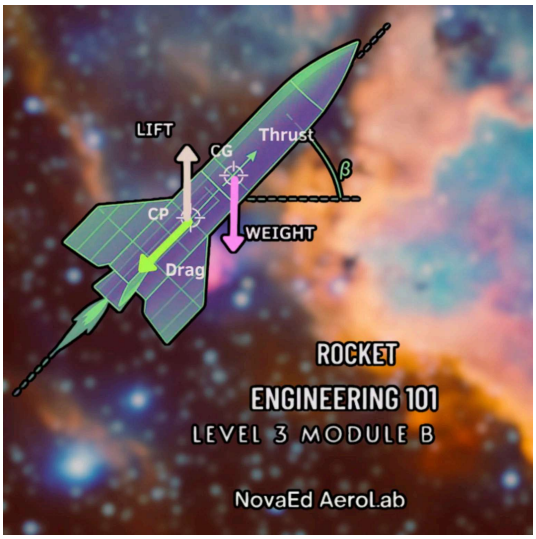
Saturdays 8:15-9:45 pm Mar-28 to May-2

Days off: Apr-4

Flight Show Day:

Sunday May-10

Tuition – Corona: Full price $660 | Discounted price $495



Description / Summary:

Unleashing Creativity with Rocket Engineering

Rocket Engineering 101 is your gateway to the thrilling world of aerospace innovation. Designed for curious learners and aspiring engineers, this program offers a hands-on approach to understanding rocket design and performance. Students apply key scientific principles and engage in creative problem-solving, building increasingly sophisticated rocket models to explore the frontier of aerospace engineering.

Learn by Doing: Design, Test, and Improve

With Rocket Engineering 101, education is transformed into an exciting journey. From thrust calculations to stability assessments, participants delve into the intricate mechanics of aerospace systems. Through real flight simulations, learners grasp the importance of drag reduction, propulsion optimization, and center-of-mass calibration. Each session is shaped to deepen technical understanding while encouraging data-driven thinking and experimentation.

The Ultimate Showcase: Rocket Launch Event

The program culminates in a thrilling final event—the Rocket Launch Showcase. This unforgettable moment allows students to present their designs, insights, and engineering achievements. The showcase not only celebrates hard work and innovation but also inspires participants to reflect on their transformative journey into the fascinating realm of aerospace design and propulsion systems.

Course 1C: Mini Space Engineers: Mission to the Stars

Grade Level: 1-4

Prerequisites: Level A and/or B

Campus Options: Corona & Tustin

Days / Times: Thursdays 4:00-5:30 pm Jan-15 to Feb-12

Days off: None

Flight Show Day: Sunday Mar-1

Tuition – Corona: Full price $500 | Discounted price $375

Notes: ***Tentatively: Tustin: Sundays 10:30-12:00 pm Mar-29 to May-3 + Flight Show Sunday Sunday May 17***

Full price $600 | Discounted price $150 (downpayment)

Offered price for Tustin is only for downpayment and represents 1/3 of the total amount. When Class is confirmed, parents are required to pay the remaining amount. If the Class is cancelled, a full refund will be issued.

Description / Summary:

Inspire Young Minds Through Space and Engineering

Immerse young learners in the wonders of space exploration and the logic of engineering with this hands-on educational program. Designed to blend creativity with science, the program invites students to step into the shoes of budding aerospace engineers as they learn to design, build, and test models of satellites, landers, and rovers. Along the way, they gain practical insights into how space missions are planned and executed, sparking curiosity and building their understanding of complex concepts in an engaging, approachable way.

Hands-On Challenges for Problem-Solving and Collaboration

Each week, students take on exciting new challenges that encourage creativity, critical thinking, and teamwork. From constructing parachutes that effectively slow down a descent to engineering durable rovers capable of navigating simulated extraterrestrial terrain, the program offers an inspiring mix of scientific exploration and imaginative problem-solving. Working together, students share their designs, learn from their peers, and refine their projects. This collaborative learning environment fosters not only technical skills but also interpersonal growth as students learn how to communicate their creative ideas effectively.

Celebrate Innovation with the 'Mission to the Stars' Showcase

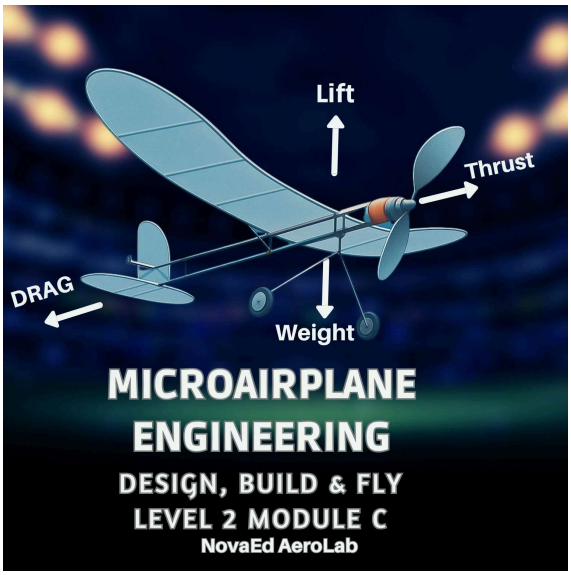
The program culminates in a joyous 'Mission to the Stars' showcase, where young participants display their favorite creations and reflect on their shared journey of discovery and innovation. This final event provides an opportunity for learners to celebrate their accomplishments with friends, family, and their peers. By demonstrating their builds and explaining their creative processes, students gain confidence in their abilities and appreciation for the world of engineering and aerospace innovation.

Why Choose This Program?

Whether your child dreams of becoming a scientist, engineer, or explorer, this program offers them the perfect opportunity to delve into STEM disciplines in an interactive, engaging format. Beyond technical skills, it instills a sense of curiosity, resilience, and a collaborative spirit essential for future innovators. If you're ready to inspire your child's imagination and open doors to the fascinating world of space engineering, this program is the perfect platform to ignite a lifelong love for discovery.

Course 2C: MicroAirplane Engineering – Design, Build & Fly

Grade Level: 5-8



Prerequisites: Level A and/or B

Campus Options: Corona & Tustin

Days / Times

Thursdays 5:30-7:00 pm Jan-15 to Feb-12

Days off: None

Flight Show Day:

Sunday Mar-1

Tuition – Corona: Full price $560 **|** Discounted price $420

Notes:

Tentatively: Tustin: Sundays 10:30-12:00 pm Mar-29 to May-3 + Flight Show Sunday Sunday May 17

Full price $600 | Discounted price $150

Offered price for Tustin is only for downpayment and represents 1/3 of the total amount. When Class is confirmed, parents are required to pay the remaining amount. If the Class is cancelled, a full refund will be issued.

Description / Summary:

Discover the Thrill of Model Aviation

Embark on an exciting journey into the fascinating world of model aviation! This comprehensive module empowers you to transform curiosity into action by designing, building, and flying your very own rubber-powered microairplanes. Combining hands-on creativity with practical applications of physics, this experience offers learners the chance to explore key aerodynamic concepts like balance, and propulsion mechanics.

Hands-On Learning Meets Scientific Exploration

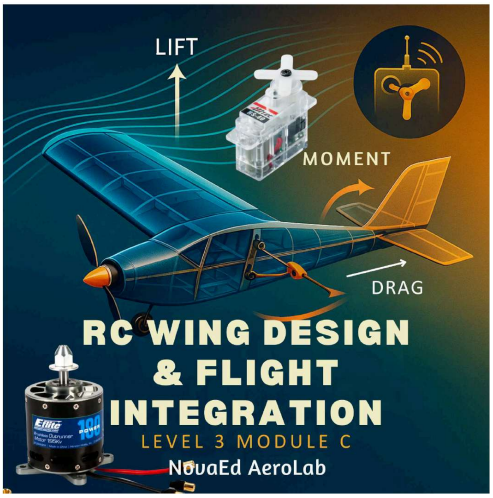
The heart of this module lies in its perfect synergy of creativity, persistence, and analytical thinking. Begin with constructing essential flight components, like wings, fuselages, and efficient propulsion systems, while gaining an in-depth understanding of lift, drag, and balance.

Collaborate, Compete, and Celebrate

Team challenges and friendly competitions push this experience to new heights. As you test your microairplane designs, collaboration naturally encourages peer-to-peer inspiration and friendly rivalry. These challenges promote refinement through experimentation, pushing all participants to deliver their best work. The module culminates in a spectacular Fly-Off event, where students showcase their beautifully crafted aircraft.

Course 3C: RC Wing Design & Flight Integration

Grade Level: 9-12



Prerequisites: Level A and/or B

Campus Options: Corona

Days / Times

Fridays 4:30-6:00 pm Jan-16 to Feb-13

Days off: None

Flight Show Day:

Sunday Mar-1

Tuition – Corona: Full price $660 | Discounted price $495

Description / Summary:

Unlock the Secrets of Advanced Aerodynamics

Step into the fascinating world of professional aeronautics with our Advanced Aerodynamics RC Wing Course. This innovative program is designed for learners eager to combine theoretical knowledge with hands-on experience. From understanding the fundamentals of lift equations to optimizing structural design, participants will craft and refine their own RC wings with professional-grade precision. The course offers a perfect blend of science, creativity, and engineering while setting the stage for deeper challenges in aerospace design.

Hands-On Learning Meets Engineering Excellence

Our course goes beyond traditional learning by incorporating hands-on integration into aeronautical design. Participants will explore advanced aerodynamic principles, balance calculations, and effective reinforcement strategies—all essential elements in creating real flying components. Every step of the process mirrors real-world engineering practices, equipping learners with the ability to solve problems through iterative design and prototype adjustments. As you test your designs, you'll uncover how even the smallest changes can impact stability, lift, and performance.

Showcase Your Masterpiece with Controlled RC Flight Tests

The program culminates in an exciting controlled flight test where participants will pilot their custom-built RC wings. This showcase provides invaluable insight into flight stability and control while highlighting the intricacies of aerodynamic optimization. By observing and refining your creations, you'll gain the technical awareness and confidence needed for future challenges in the field of aerospace engineering. Whether you're a beginner or aiming to expand your knowledge, this course is the ultimate launchpad into the thrilling world of aeronautics.

Course 1D: Junior Aviators: Powered Flight Adventures

Grade Level: 1-4

Prerequisites: Level A and/or B+C

Campus Options: Corona

Days / Times

Thursdays 4:00-5:30 pm Mar-26 to Apr-30

Days off: Apr-2

Flight Show Day:

Sunday May-10

Tuition – Corona: Full price $480 | Discounted price $360

Description / Summary:

Embark on an Adventure in Powered Flight

This introductory powered flight program is a perfect opportunity for young learners to dive into the world of aviation. Designed to spark curiosity and foster creativity, this program teaches the core principles of powered flight — how engines, propellers, and design come together to make planes soar. Through step-by-step guidance, students explore the fundamentals of power, thrust, and control, discovering the incredible science behind flight.

Interactive Science Meets Hands-On Learning

Each session is carefully crafted to blend education with fun. Students are guided to engage in hands-on activities, from building their own plane models to experimenting with design modifications. As they tweak balance adjustments and refine their creations, young minds uncover the thrill of innovation. This dynamic learning environment transforms complex aerodynamics into an accessible, tangible experience for any budding engineer or scientist.

Celebrating Teamwork, Discovery, and Flight

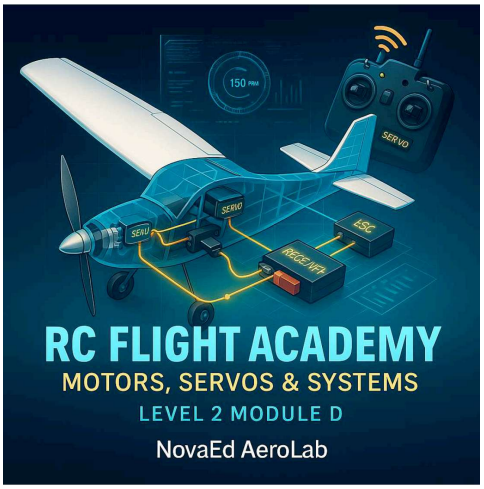
Throughout the program, instructors emphasize the importance of collaboration, patience, and curiosity. Participants are encouraged to share their progress and insights, enriching the learning experience for everyone involved. The culmination of the program is the high-energy Powered Flight Day. On this special occasion, students showcase their designs in action. It's more than a demonstration; it's a celebration of their creativity, dedication, and newfound knowledge.

The Perfect Choice for Budding Innovators

With a focus on making science interactive and fun, this program nurtures a passion for learning in a supportive and engaging environment.

Course 2D: RC Flight Academy: Motors, Servos & Systems

Grade Level: 5-8



Prerequisites: Level A and/or B+C

Campus Options: Corona

Days / Times

Thursdays 5:30-7:00 pm Mar-26 to Apr-30

Days off: Apr-2

Flight Show Day:

Sunday May-10

Tuition – Corona: Full price $540 | Discounted price $405

Description / Summary:

Discover the Thrill of Remote-Controlled Flight

Take your understanding of powered flight to new heights with this immersive module focused on RC technology. Designed to bridge theoretical concepts with practical applications, this hands-on experience delves into the core principles of thrust, lift, and control surfaces. By interacting with simplified RC components, learners gain firsthand exposure to the mechanical and electrical systems that drive modern aviation. Whether you're passionate about engineering, aviation, or innovation, this module provides a unique opportunity to explore the seamless interaction between these critical elements.

Unleash Creativity Through Iterative Design Thinking

One of the standout features of this module is its emphasis on iterative design thinking. Students are empowered to refine balance, test response, and analyze critical flight data—all while exploring the intricate dynamics of powered flight. Every experiment is an opportunity to learn, as participants adjust key variables to achieve enhanced aircraft performance. Guided analyses and collaborative teamwork create an environment for innovation, where creativity and engineering knowledge come together to solve complex challenges. This iterative approach not only improves technical skills but also hones problem-solving abilities.

Live the Experience: Controlled RC Flight Presentation

The final showcase is an exciting highlight of the program. Participants demonstrate their refined aircraft designs in a controlled RC flight environment, applying all the concepts learned throughout the module. This is where teamwork and engineering expertise truly shine. Teams work collaboratively to achieve stable and impressive flight maneuvers while pushing the boundaries of their creative and analytical skills. It's an unforgettable experience that brings powered-flight engineering to life and celebrates both the art and science of modern aviation.

Course 3D: Aerospace Masterclass: Design, Build & Fly RC Aircraft

Grade Level: 9-12

Prerequisites: Level A and/or B+C

Campus Options: Corona

Days / Times

Fridays 4:30-6:00 pm Mar-27 to May-1

Days off: Apr-3

Flight Show Day:

Sunday May-10

Tuition – Corona: Full price $660 | Discounted price $495

Description / Summary:

Unleashing Your Potential in Aerospace Engineering

Are you ready to take your understanding of aerospace engineering to new heights? The NovaEd AeroLab masterclass is your ultimate hands-on experience—a capstone program designed to challenge, inspire, and prepare aspiring innovators for the aerospace industry. This program integrates aerodynamic design, propulsion systems, and structural engineering to create a full RC aircraft project. Guided by seasoned mentors, students work on cutting-edge techniques in ground testing, flight trials, and data-driven analyses, ensuring every decision is rooted in precision and engineering discipline.

Holistic Learning Through Teamwork and Mentorship

What sets this program apart is its emphasis on teamwork and problem-solving. The collaborative environment mirrors the dynamics of real-world aerospace projects, fostering the ability to navigate complex challenges and refine critical thinking skills. With experienced mentors providing actionable feedback, participants actively engage in iterative processes—planning, building, and optimizing their aircraft designs. The fusion of technical mastery and creativity unlocks new possibilities, preparing learners for advanced STEM and aerospace pursuits.

Showcase Your Mastery at the Live Flight Demonstration

The program wraps up with a unique and memorable celebration of accomplishments. Participants unveil their fully functional aircraft designs during the showcase event, presenting their engineering decisions and development journey to an audience of peers, mentors, and industry professionals. The live flight demonstration highlights the culmination of your learning as your aircraft soars, marking your readiness for higher studies or a dynamic future in aerospace engineering. This capstone experience becomes more than a program—it becomes a defining moment in your educational journey.