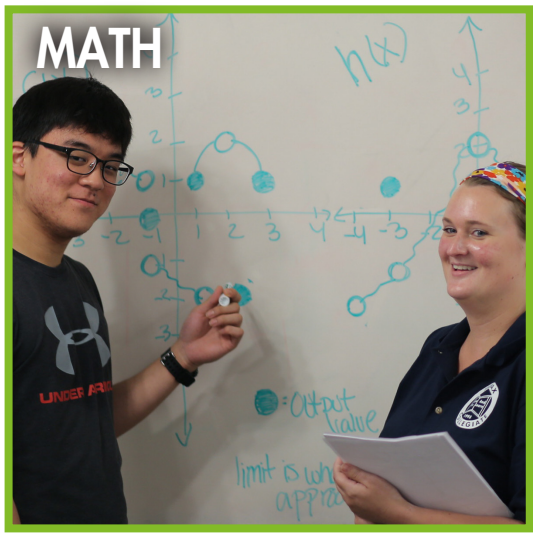
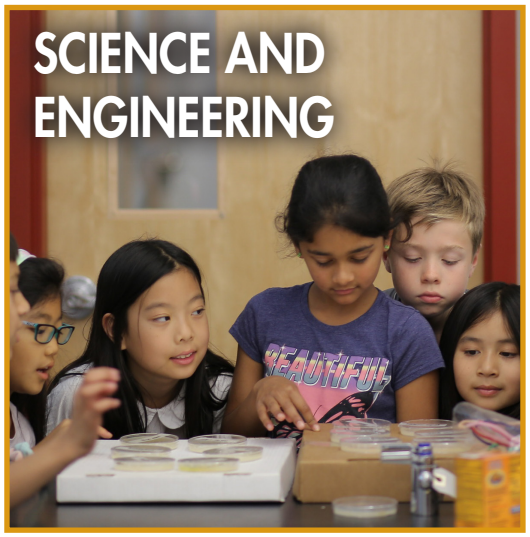
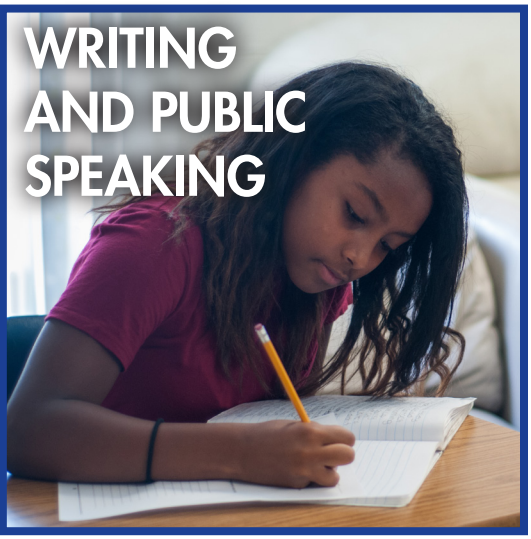
2025 SUMMER

FAIRFAX COLLEGIATE
Have Fun And Learn
1993

FOR RISING GRADES 3-12







HAVE FUN AND LEARN!

FAIRFAX COLLEGIATE SUMMER 2025

This summer your child can have fun and learn!

Since 1993, Fairfax Collegiate has provided challenging and engaging summer courses in math, writing, science, public speaking, test prep, computer science, filmmaking, and technology.

Courses are built around individual work, small-group instruction, and hands-on activities.

Classes meet in-person at locations throughout Northern Virginia and typically enroll twelve students or fewer.

Instructors include undergraduate and graduate students at leading universities, and area public and private school teachers. They take into account each student's interests and needs, and students are able to get help at any time.

Fairfax Collegiate is Northern Virginia's largest and oldest summer enrichment program. Last year, students completed over 4,000 summer courses.

Register now to reserve your child's opportunity for academic and creative growth at Fairfax Collegiate!

SUMMER 2025 LOCATIONS

Ashburn
Loudoun School for Advanced Studies
20577 Ashburn Rd.

Chantilly
St. Timothy Catholic School
13809 Poplar Tree Rd.

McLean
Redeemer Lutheran Church
1545 Chain Bridge Rd.

Reston
Edlin School
10742 Sunset Hills Rd.

Tysons
BASIS Independent McLean
8000 Jones Branch Dr.

Vienna
Green Hedges School
415 Windover Ave NW

PROGRAM OVERVIEW

SUMMER 2025 SESSIONS AND HOURS

Session	Start Date	End Date	Duration	Half Day	Full Day
Session I	June 16	June 27	10 days	$550	$865
Session II	June 30	July 11	9 days*	$500	$785
Session III	July 14	July 25	10 days	$550	$865
Session IV	July 28	August 8	10 days	$550	$865
Session V	August 11	August 15	5 days	$290	$460

*No class July 4
**The fee for AM or PM Extended Care is $100 per session or $12 per day.

Early Registration Discount:
Save 5% when you register and pay in full by April 15

Siblings/Multiple Sessions:
Save 5% when you register siblings or for multiple sessions

Program Times

Morning 8:30 a.m. to 12:00 p.m.
Afternoon 12:30 p.m. to 4:00 p.m.
Full Day 8:30 a.m. to 4:00 p.m.

Extended Care Hours**

Morning 7:30 a.m. to 8:15 a.m.
Afternoon 4:15 p.m. to 6:00 p.m.

Office

722 Grant St., Suite J
Herndon, VA 20170
Tel: 703 481-3080

SUMMER PROGRAM REGISTRATION

Online Registration

Plan your child's schedule and register online at **fairfaxcollegiate.com**

Grade Levels and Placement

Course grade levels are *rising grade levels*, the grade levels students will enter in the fall of 2025. Please contact us before enrolling a child in a course designated for older or younger students.

Registration Deadlines

We enroll students until classes are full. Many classes are full by early May. We maintain waiting lists for full classes.

Payment

A non-refundable deposit of $100 per session (applied to the total cost of the program) is due at registration. The balance is due June 1.

Registration Changes

There is no fee for changing sessions, locations, or classes. (There may be a balance if the new session has a higher price.)

Cancellation Policy

For cancellations before June 1, Fairfax Collegiate will refund program fees less the non-refundable deposit of $100 per session. After June 1, we will provide a credit for program fees paid for use by a family member over the next year.

Emergency Contact Form

For in-person classes there is a one-page *Emergency Contact and Permission Form*. There is no required health form.

Full Participation Terms

Please visit **fairfaxcollegiate.com/summer/participation-terms**

QR Codes

The QR codes in this catalog link to the main subject and location pages on **fairfaxcollegiate.com**, which in turn link to individual pages for each course. These course pages contain a more detailed course description, a day-by-day syllabus, and the summer schedule for the course.

Start Here

The program overview is at **fairfaxcollegiate.com/summer**

Start Here!

MATH

Get a head start on math for the upcoming year, review math from last year, build creative problem solving skills, or prepare for math competitions and gatekeeping math exams.

Each course features a diagnostic test, daily one-on-one coaching, small group instruction, enrichment activities and puzzles, and real-world applications.

Virginia Math 3-4
Grades 3-4

Keep math skills sharp over the summer.

Review, reinforce, and learn core Math 3 and Math 4 concepts.

Topics include basic operations, fractions, decimals, measurement, geometry, and probability.

AAP Math
Grades 3-4

Use summer to work beyond 3rd and 4th grade level standards.

Topics include fractions, decimals, integers, geometry, perimeter and area, statistics, ratios and proportions, and algebra.

Word Problems
Grades 3-4

Apply your 3rd and 4th grade math skills to challenging real-world situations.

Specific areas of focus include the four basic operations, time, converting measurements, money, fractions, shapes and geometry, and patterns.

Virginia Math 5-6
Grades 5-6

Reinforce elementary school math.

Progress through Math 5 and Math 6 in a small group setting.

Topics include fractions and decimals, algebraic expressions and equations, proportions, measurement, geometry, and statistics.

Problem Solving
Grades 5-6

Learn strategies for solving challenging word problems.

Areas of focus include algebra, function machines, pattern and logic problems, fractions and ratios, geometric problems, permutations, and cryptarithms.

MathCounts and MOEMS
Grades 5-6

Explore competitive math.

Students tackle algebra, geometry, and combinatorics topics through problem-solving exercises and interactive lessons.

With mock exams, daily problem sets, and creative projects, students strengthen their critical thinking and gain a deeper understanding of math contest concepts.

IAAT Prep
Grades 5-6

Get ready for the gatekeeping exams for 7th grade Algebra I placement.

Topics include the four subtest sections of the IAAT, and the five categories tested on the Grade 7 Math SOL.

Virginia Pre-Algebra
Grades 6-8

Make the transition from elementary to middle school math with confidence.

Topics include linear functions, exponents, algebraic equations and inequalities, geometry, volume and surface area, probability, and statistics.

Virginia Algebra
Grades 7-9

Get ready for your first high school-level math course: Algebra I.

Topics include equations, inequalities, functions, exponents, polynomials, quadratics, and statistics.

Virginia Geometry
Grades 7-9

Prepare for high school Geometry.

Topics include parallel and perpendicular lines, triangles, congruence and similarity, polygons, circles, solid figures, and transformations.

SAT Math
Grades 7-9

Learn the Algebra and Geometry concepts necessary for success in the SAT.

The Math section of the SAT includes several concepts from high-school-level Algebra and Geometry. In this course, students learn the necessary topics for success and complete practice questions to solidify their understanding.

AMC Contest Math
Grades 7-9

Master strategies to conquer challenging contest math problems.

Students investigate AMC8 and AMC 10 topics including number theory, algebra, geometry, and probability.

Students build problem-solving skills and confidence in tackling challenging math problems.

School Year Math

Get in-person math support and acceleration at the **Virginia School of Math:**

fairfaxcollegiate.com/virginia-math

Summer Math Online

This summer prepare online for high school math and CS courses:

- **Intro to Algebra**
- **Intro to Geometry**
- **Intro to Algebra II**
- **Intro to Precalculus**
- **Intro to Calculus**
- **SAT Math Prep**
- **Intro to Computer Science**
- **Python Programming**

Morning and evening classes available at fairfaxcollegiate.com/math-online

WRITING

Write every day, meet individually with instructors, and receive detailed suggestions for improvement.

Writing courses are small-group seminars, taught by skilled writers, and balance opportunities for creativity and self-expression with direct instruction in writing.

Writing Fundamentals
Grades 3-4

Learn to write varied, grammatically correct sentences, and build a solid foundation for writing paragraphs.

This course emphasizes word choice, spelling, sentence structure, paragraph organization, and proofreading.

Instructors provide detailed suggestions for improving spelling and grammar as well as ideas and organization.

Reading Reinforcement
Grades 3-4

Read classic poems, fables, and stories, and write about themes, plots, and characters.

Assignments include summaries, reading comprehension exercises, and interpretations.

Students write responses to readings and receive detailed feedback from their instructor.

Writing and Revising
Grades 3-4

Write, revise, and discuss personal narratives, essays, short stories, and poems.

Topics include writing organized paragraphs, constructing persuasive written arguments, providing constructive criticism, and revising drafts.

Instructors provide detailed written and verbal feedback on student work.

Advanced Writing
Grades 3-4

Strengthen your ability to argue, inform, and inspire with your writing.

Students learn how to organize their thoughts, write compelling introductions and conclusions, and use descriptive language to enhance their explanations and arguments.

Writing Skills & Grammar
Grades 5-6

Write simple, compound, and complex sentences; learn note-taking; create outlines; and draft, revise, and edit well-organized paragraphs.

This writing course focuses on organization, paragraph construction, grammar, spelling, and mechanics.

Topics include thesis statements, transitions, active voice, word choice, and common errors.

Strategic Reading
Grades 5-6

Read articles, essays, and stories, practice close reading and note-taking, and write summaries and interpretations.

Students learn and apply reading strategies and comprehension tools including looking for cause and effect, outlining, questioning, skimming, summarizing, and synthesizing.

Creative Writing
Grades 5-6

Write, share, discuss, and revise your own personal narratives, short stories, plays, and poems.

Students revise drafts of their works based on their instructor's written comments. Students may publish their works in a class anthology and enter their works into writing contests.

Writing for Middle School
Grades 5-6

Learn to write five-paragraph essays, the mainstay of writing across the middle school curriculum.

Students learn how to use thesis statements and supporting sentences to structure paragraphs, and then how to use paragraphs to structure essays.

Writers' Workshop
Grades 7-9

Write, share, discuss, and revise your own short stories, poems, articles, and personal essays about topics that are interesting to you.

This course provides middle school students with intensive practice in writing. Classes are small-group seminars.

Students learn the entire writing process including brainstorming, outlining, drafting, revising, and editing.

Reading for Meaning
Grades 7-9

Become a critical reader by reading opposing viewpoints about contemporary issues, practicing close reading, notetaking, and summarizing.

Classroom exercises develop literary analytical tools including compare/contrast, cause/effect, and prediction.

Genres include short stories, journalistic writing, essays, and poetry. Students write a variety of compositions on the results of their analyses and the literary themes expressed in the texts. They also write an original work.

Writing for High School
Grades 7-9

Become proficient at writing five-paragraph essays through developing sentence variety and practicing notetaking and outlining.

Topics include essay and paragraph structure, persuasive arguments, thesis statements, clean style, mechanics, grammar, diction, and idioms.

Students write and revise daily five-paragraph essays, with a focus on persuasive, expository, and narrative essays.

Analytic Writing
Grades 7-9

Learn to both construct and evaluate written arguments.

Students read, discuss, critique, and rebut a variety of essays, speeches, and articles that present and support complex ideas.

Students write, discuss, and revise their own original analytic writing about topics of personal interest.

SCIENCE

Advance the boundaries of your scientific knowledge by reading, thinking, discussing, hypothesizing, and experimenting. Science courses are built around hands-on labs.

Hands-On Science
Grades 3-4

Complete labs to get hands-on experience with biology, chemistry, and physics.

Biology activities include plant, bacteria, microscope, and epidemiology labs. Chemistry activities include water labs, chemical reaction labs, and acids and bases labs. Physics activities include force/friction labs, bridge-building experiments, and energy and power labs.

Chemistry Concepts
Grades 3-4

Perform experiments to learn about matter, phase changes, acids, bases, and reactions.

Students conduct experiments with non-hazardous chemicals and supplies. Examples include pH testing on basic substances and exploring properties of ooblek.

Spy Science
Grades 3-4

Hone your detective skills, and learn the secrets of spying, sleuthing, and subterfuge.

Students study fingerprint and handwriting analysis, chemical analysis, forgery identification, spy gadgets, surveillance tools, encryption, and code breaking.

Activities include spy missions to apply what they have learned throughout the course.

Chem Workshop
Grades 5-6

Learn about chemistry through a variety of hands-on exercises with solutions and reactions.

Topics include experimental design, the periodic table, atomic structure, chemical bonds and reactions, acids and bases, phase changes, pressure and temperature, and solubility.

Students model atoms, make casein glue, investigate fluid viscosity, simulate acid rain, refine invisible inks, and explore chemical reactions.

The Human Body
Grades 5-6

Use hands-on activities to learn about the major organ systems.

This course explores four key organ systems: the cardiovascular system, the digestive system, the nervous system, and the musculoskeletal system.

Class activities include reading assignments, discussions, hands-on exercises, experiments, working with human skeleton and body anatomy models, and medical simulations. Students also create life-sized posters of their organ systems.

Detective Science
Grades 5-6

Practice the techniques used in crime scene investigations.

Students complete labs to learn more about crime scene investigation. Topics include fingerprint and handwriting analysis, chemical analysis, forgery identification, surveillance tools, shoe prints, and blood spatter patterns.

Forensic Science
Grades 7-9

Become a crime scene investigator with labs to help you solve mysterious cases.

Labs include crime scenes, tool marks, chemical analysis, counterfeit documents, fiber identifications, fingerprints, handwriting analysis, forgeries, ink chromatography, shoe prints, forensic anthropology, and blood spatter patterns.

Each class attempts to solve a simulated crime using the forensic techniques learned.

Neuroscience
Grades 7-9

Use computer simulations and actual nerve signal measurements to learn about the nervous system.

Topics include brain structure, motor control, neurons, neurotransmitters, action potentials, signal transduction, potentiation, memory, and neurodegenerative diseases.

Experiments include computer simulations, human motor nerve signal measurement, and brain wave pattern observation and interpretation.

Medical Science
Grades 7-9

Investigate organ systems through dissection and phlebotomy simulations, and learn about causes and treatment of disease.

Students discuss human anatomy, organ systems, pathology, epidemiology, and pharmacology.

Activities include demonstrations, labs such as bacterial cultures, and simulations of medical procedures such as suturing and phlebotomy.

Animal Physiology
Grades 7-9

Complete dissections of preserved specimens to learn about animal anatomy, physiology, and organ structures.

Students complete a variety of full laboratory dissections of preserved specimens, including owl pellets, annelids, frogs, rats, sheep brains, and dogfish sharks.

Topics covered through these discussions include animal taxonomy, skeletons, organs, the nervous, circulatory, and digestive systems, and convergent and divergent evolution.

PUBLIC SPEAKING

fairfaxcollegiate.com/public-speaking

Build confidence speaking in front of an audience and debating, persuading, and leading.

Courses provide students with daily opportunities to improve their public speaking skills by preparing and delivering speeches and arguments.

Confident Speaking
Grades 3-4

Write and deliver a variety of speeches on topics of your choosing to gain confidence in a group setting.

Students present daily speeches to the class under guidance from an instructor who helps improve the content and delivery of the speech.

Students learn how to encourage each other and provide constructive feedback.

Conversation Club
Grades 3-4

Speak with confidence, listen carefully, and create stronger connections.

Students learn essential skills like active listening, nonverbal communication, confident speaking, and giving and receiving feedback.

Storytelling
Grades 3-4

Bring your stories to life with confidence and creativity.

Students explore creative expression through writing, speaking, and acting. They create characters, develop plots, and deliver engaging performances while building confidence in public speaking.

Elementary Debate
Grades 5-6

Learn the basics of debate as you go head-to-head against classmates to discuss relevant topics.

Debate topics are both challenging and directly relevant to students.

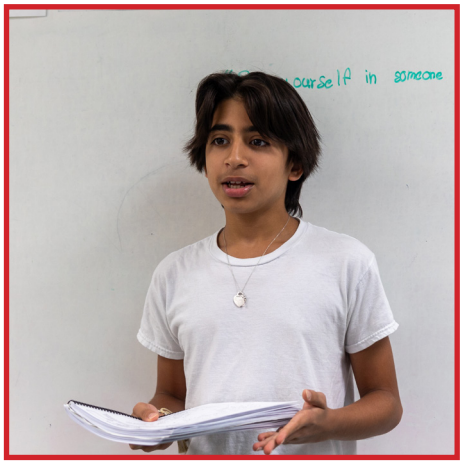
Group exercises develop public speaking, critical reasoning, argument construction, rebuttal, and evidence presentation skills.

Public Speaking
Grades 5-6

Deliver written, extemporaneous, and impromptu speeches in front of an audience each day, and build up your skills in public speaking.

Students present speeches and incorporate feedback from their instructor regarding eye contact, body language, word choice, voice inflection, and more.

Students also develop research skills as they work on their final speech of the session.



Middle School Debate
Grades 7-9

Conduct research, gather evidence, and write persuasive arguments as you participate in daily debates over important issues.

Students learn public speaking skills as they craft arguments and rebuttals.

Topics in daily debates include issues of national and personal importance.

Model UN
Grades 7-9

Learn how the United Nations functions by acting as an ambassador and negotiating with other countries to draft resolutions and solve global problems.

Students develop critical thinking, negotiating, debating, and writing skills.

Topics include the United Nations, the Security Council, rules and procedures, speech-making, negotiating, and drafting resolutions.

Mock Trial
Grades 7-9

Take on the role of an attorney, witness, judge, or jury member as you learn about the American court system and participate in trials.

Activities include selecting jurors, delivering opening statements, examining witnesses, presenting evidence, making closing arguments, and deliberating verdicts. Discussions address the role of courts, due process, civil and criminal trials, and standards of proof.

FILMMAKING

fairfaxcollegiate.com/filmmaking

Develop artistic and technical skills. Make short films that inform, persuade, tell stories, and create emotion.

Students brainstorm ideas, write and revise scripts, operate cameras and sound equipment, and learn and practice video editing skills.

Action Films

Grades 3-4

Learn the process of filmmaking by creating an exciting short movie.

Students create a film from start to finish under the guidance of an experienced instructor.

Students work as both cast and crew before editing their films into a final product.

Claymation

Grades 3-4

Use clay to create characters and scenery for short films.

This course covers claymation films from start to finish, allowing students to go through the whole process.

Students learn scriptwriting, storyboarding, set construction, photography, sound recording, and video editing.

Filmmaking

Grades 5-6

Make short films and work through all the stages of production.

Students brainstorm ideas, write an original script, create shot lists, and draw storyboards. Next they cast roles, rehearse scenes, procure costumes and props, and shoot and edit their film.

Students use tripod-stabilized video cameras, external microphones, and iMovie. They share films to a private website for home viewing.

Stop-Motion Animation

Grades 5-6

Use handcrafted figurines and scenery, household objects, and digital cameras to create a compelling story.

This course provides an overview of photography, sound recording, and video editing.

Students use still cameras, audio recorders, and iMovie to create stop-motion animation films.

Digital Cinema

Grades 7-9

Write, direct, produce, and edit short films with high production values.

Exercises cover acting, script writing, storyboarding, location scouting, camera operation, lighting, and sound.

Students produce one or more short films using tripods, Canon C100 cinema cameras, boom microphones, costumes, props, and lights.

They edit their films with iMovie or Final Cut Pro and share them to a private website for home viewing.

ENGINEERING

fairfaxcollegiate.com/engineering

Apply concepts from math, science, and technology to solve engineering challenges—whether it's building bridges, exploring space, designing 3D models, or designing new aircraft and medical devices.

Projects + Teamwork + Communication: Courses are built around student-driven projects and presentations.

Buildings and Bridges
Grades 3-4

Complete building challenges using engineering, architecture, and physics.

Students use Lego blocks, Erector sets, K'NEX, unit blocks, and basic classroom supplies to solve challenges.

Physics topics include material density, center of gravity, force diagrams, and geometry principles. Activities include weight and balance challenges, height competitions, and bridge design.

Space Exploration
Grades 3-4

Explore astronomy and space travel through experiments, projects, and simulations.

Students investigate space suits, rocketry, the phases of the moon, telescopes, rovers, and zero-gravity equipment. They build model spacecraft, simulate space missions, invent constellations, and find stars in a virtual planetarium.

3D Modeling
Grades 5-6

Step into the world of 3D design and bring your ideas to life.

Students use Fusion360 to create printable 3D models. Students learn to create shapes, manipulate forms, and prepare designs for 3D printing.

Projects are geared toward sparking creativity and encouraging experimentation with different shapes and features.

Intro to 3D Printing
Grades 5-6

Design 3D objects and bring them to life on a 3D printer.

Students learn to set up, operate, and troubleshoot printers and use computer-assisted design software to create digital models for printing.

Lessons highlight commercial and industrial applications of 3D printing and different materials. Students crate objects around themes such as cities, puzzles, or fantasy objects.

Aerospace Engineering
Grades 7-9

Launch into the physics and engineering behind flight, rocket science, and space exploration.

Topics include the design, construction, and operation of aircraft and spacecraft, emerging aerospace technologies, the physics of flight and orbit, and the chemistry of propulsion.

Projects include flying hot air balloons, testing airfoils in a wind tunnel, and firing DIY sugar-powered rocket motors.

Biomedical Engineering
Grades 7-9

Envision and prototype new medical equipment, prostheses, and artificial organs using 3D printing, computer simulations, and traditional modeling.

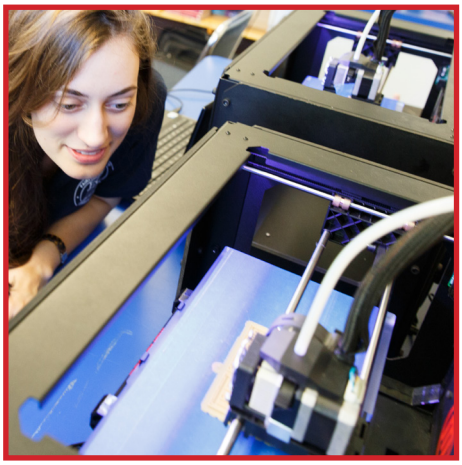
Topics include biochemistry, cell physiology, cell cycles, cell division, DNA structure and synthesis, protein synthesis, gene expression, tissue structure, human anatomy, and genetic engineering.

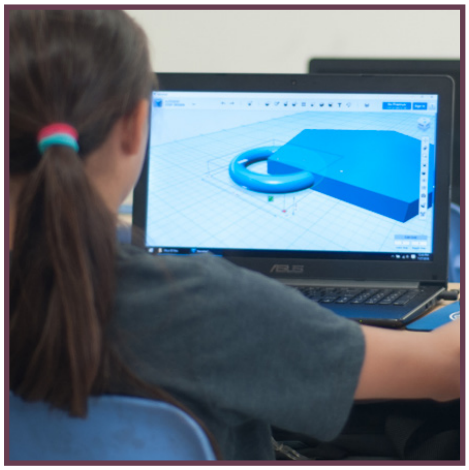
3D Printing
Grades 7-9

Design and print 3D objects.

Students learn to set up, operate, and troubleshoot printers and use computer-assisted design software to create digital models for printing.

Lessons highlight commercial and industrial applications of 3D printing and different materials. Students crate objects around themes such as cities, puzzles, or fantasy objects.





ROBOTICS AND DRONES

fairfaxcollegiate.com/robotics-drones

Design, construct, program, and pilot machines that navigate autonomously on the ground or soar through the sky.

Projects + Teamwork + Communication: Courses are built around student-driven projects and presentations.

Mobile Robotics

Grades 3-4

Build and program LEGO Mindstorms EV3 robots.

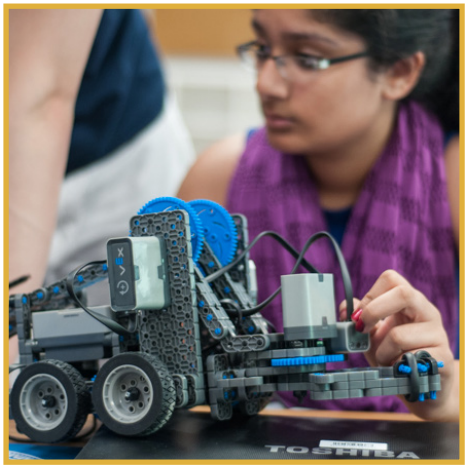
Projects include building a trash collecting robot, a robotic arm, and a robot that navigates mazes. The spotlight skill is elementary programming using the EV3 graphical environment.

Robotics Zoo

Grades 3-4

Build LEGO Mindstorms EV3 robots that mimic the appearance and behavior of animals.

Projects include building toads, grasshoppers, polar bears, Komodo dragons, and other animals. The spotlight skill is building unusual designs.



Intro to Drones

Grades 5-6

Fly different types of drones, and learn about modern drone technology.

Students participate in obstacle courses, aerial cinematography, airborne surveillance, and drone races.

Topics include drone components, basic physics of flight, airspace restrictions, and the ethical use and future applications of drones.

Robotics Olympiad

Grades 5-6

Build and program LEGO Mindstorms EV3 robots, and engage in friendly competitive challenges.

Activities include soccer, go kart racing, and maze navigation. The spotlight skill is optimizing robots to create competitive advantages.

Robotics Engineering

Grades 5-6

Use the engineering process to solve problems and obstacles with robots you can program.

Projects include top spinning, mini golf, and hill climbing. The spotlight skills are keeping a design journal and revising designs through trial and error.

Drones

Grades 7-9

Fly, program, and learn about drones.

Students participate in obstacle courses, search and rescue simulations, airborne surveillance, and aerial cinematography. Students write simple computer programs to control drones.

Robotics Combat

Grades 7-9

Design, build, and program LEGO Mindstorms EV3 robots to compete in daily head-to-head battles.

Projects include jousting, a grenade drop battle, and sumo wrestling. The spotlight skill for the course is optimizing robot designs to gain an advantage.

Competitive Robotics

Grades 7-9

Use the LEGO Mindstorms EV3 platform to participate in a diverse mix of competitive events.

Projects include drag racing, rock paper scissors, and a reaction time game. The spotlight skill for the course is revising designs through iteration and trial and error.

COMPUTING

Write your own MakeCode or Python programs, create Minecraft mods, gain hands-on experience with computer hardware and electronics, or explore generative AI.

Projects + Teamwork + Communication: Courses are built around student-driven projects and presentations.

Intro to MakeCode
Grades 3-4

Learn to code and build interactive games.

Students dive into coding with Microsoft MakeCode, and learn the basics of game design and programming. Hands-on lessons and tutorials make coding engaging and accessible to students with no prior experience.

MicroBit
Grades 3-4

Discover the world of electronics and coding with Microsoft MicroBit 3-4.

Students explore the basics of programming and hardware using the MicroBit, a small, programmable microcontroller. Students create interactive projects that combine software and physical components

Minecraft Modding
Grades 3-4

Customize and extend Minecraft by building your own mods.

Students use MCreator to design, build, and test Minecraft mods. Students customize blocks, items, creatures, environments, achievements, triggers, and events.

MakeCode
Grades 5-6

Step into the world of coding and game design.

Students are introduced to fundamental programming concepts with Microsoft MakeCode, a user-friendly, browser-based coding platform. Students learn the basics of game design and programming, such as sprites, game controls, and the use of conditionals, loops, and variables.

Intro to Python
Grades 5-6

Work with other budding computer scientists and learn about programming.

Students explore fundamental computing concepts including computer hardware, binary numbers, boolean logic, data, and programs.

Next, students get an introduction to the Python language and write simple games.

Minecraft and Python
Grades 5-6

Learn Python programming by writing scripts to enhance Minecraft.

Programming topics include variables, types, conditional statements, loops, collections, and algorithms.

Students write Python programs to generate massive structures and cities inside of Minecraft. In the second week, they create customized Minecraft minigames.

Raspberry Pi
Grades 5-6

Learn about electronics and programming with Raspberry Pi, a tiny computer.

Projects include building a video game controller, creating a security camera, plotting a virtual city map, programming a "flying birds" game, and installing and using a Linux distribution.

Artificial Intelligence
Grades 7-9

Explore the power of generative AI to design, create, and inspire.

Students gain insight into how generative AI works while reflecting on its ethical implications and societal impact through discussions and hands-on activities.

Class projects such as designing an interactive story, comparing popular AI image generators, and creating an AI tutor to teach new skills allow students to apply their knowledge in innovative ways while fostering creativity and critical thinking.

Computer Home Labs
Grades 7-9

Create and manage your own home lab to explore real-world IT, hardware, and cybersecurity skills.

Students gain practical experience with computer hardware, software, networking, and cybersecurity through real-world projects and troubleshooting scenarios as they manage our classroom home lab environment.

Projects include assembling personal computers, setting up home networks, configuring firewalls, creating virtual machines, and exploring basic cybersecurity principles. As a final project, students take a mock CompTIA A+ exam.

Python
Grades 7-9

Learn Python, the world's most popular scripting programming language.

Topics include Python language syntax, the fundamental data structures, organizing Python programs using functions, classes, and modules, and reading and writing text files.

Projects include utilities and games.

Arduino
Grades 7-9

Combine programming and the use of circuit boards to create a variety of devices.

Students explore the intersection of electronics, computers, and programming by building projects with Arduino, an open-source electronics prototyping platform.

Projects include LED Dice, a binary counter, a Morse code translator, a lie detector, and a motion-sensing alarm.

SIMULATORS AND VR

fairfaxcollegiate.com/simulators-vr

Learn to drive cars or fly planes using sophisticated digital simulators. Navigate and create virtual worlds using computers and VR headsets.

Projects + Teamwork + Communication: Courses are built around student-driven projects and presentations.

Driving Simulators
Grades 5-6

Start your driving adventure with simulators designed for fun and learning.

Students use realistic city driving and racing simulators to explore city streets, highways, and winding country roads.

Class activities include navigating busy intersections, driving in rain or snow, and taking laps on race tracks.

Flight Simulators
Grades 5-6

Learn how to fly aircraft with a realistic simulator used by professional pilots.

Students practice takeoffs, landings, and in-flight navigation while piloting virtual aircraft in realistic environments, using Microsoft Flight Simulator, flight stick controllers, and high performance gaming PCs

Intro to Virtual Reality
Grades 5-6

Explore virtual reality apps and games that are both fun and educational.

VR activities include visiting ancient cultures, soaring through space, and navigating environments from the ocean floor to the inside of a human cell. Students' creations come to life around them as they paint and sculpt in 3D and even venture into the world of Minecraft.

Driving School
Grades 7-9

Learn to drive a car, and explore automotive safety, engineering, and racing

In addition to daily lessons with street driving and performance racing simulators, students discuss a variety of topics related to common and advanced driving maneuvers, safety engineering, physics, basic auto maintenance, and competitive racing formats.

Flight School
Grades 7-9

Learn flight skills, and explore aviation safety, engineering, and history.

With Microsoft Flight Simulator, students learn basic and advanced flight maneuvers, how to deal with changing weather conditions and emergency scenarios, and recreate historic moments in aviation.

Virtual Reality
Grades 7-9

Navigate and create virtual reality environments.

In the first week, students use VR to visit landmarks across the globe, soar through space, and navigate environments from the ocean floor to the inside of a human cell.

In the second week, students use the Unity software development platform to program and play games in VR, and end by building their own 3D world to explore.

DIGITAL DESIGN

fairfaxcollegiate.com/digital-design

Explore game design, digital animation, architectural design, and digital photography.

Students work hands-on with feature-rich, open-source software, develop creative and technical skills, and gain a strong foundation in the principles of visual communication.

Scratch

Grades 3-4

Discover the power of coding as you build games and bring characters to life.

Students dive into digital animation and game design using Scratch, a fun beginner-friendly coding platform. As they go, they bring their ideas to life through block-based coding, crafting animations, stories, and games.

Architectural Design

Grades 5-6

Learn about architecture and how to use Google SketchUp, a free digital drafting software package.

Architecture topics include the history of residential architecture, international housing styles, and form and function in residential design.

Students practice 2D drafting and 3D modeling. As a final project, each student creates and presents his or her "dream house" using Google SketchUp.

GameMaker Studio

Grades 5-6

Design, code, and play your own unique game creations.

Students explore the fundamentals of creating their own games from start to finish. They design characters, build engaging levels, and program basic gameplay mechanics while exploring the GameMaker interface and tools.

Through hands-on activities, students develop skills in coding player movements, implementing interactive objects, and designing game elements like backgrounds and sound effects.

Blender

Grades 7-9

Step into the exciting world of 3D animation with Blender.

Students learn the foundational skills to create their own animated worlds and bring their ideas to life using Blender, a powerful and professional-grade animation software.

Students design characters, animate objects, and compose unique 3D environments, learning how to make objects move, set up realistic lighting, and create special effects.

Godot

Grades 7-9

Design and code your unique gameplay experience.

Students use the Godot engine, a powerful tool for creating 2D and 3D games, to explore essential concepts like character movement, physics, and visual effects. They gain experience in building interactive environments and designing elements that make games engaging and fun to play.

Photography

Grades 7-9

Create digital images with intention by using natural and artificial light sources, interchangeable lens camera systems, and open-source editing software.

Exercises emphasize visualization, composition, the exposure triangle, lighting, and color.

Genres include still life, food, portraits, products, sports, action, and architecture.

TJ AND ACL PREP

fairfaxcollegiate.com/tj-acl-prep

Get test-taking practice, writing tips, and individual coaching to prepare to earn admission to TJHSST and the Academies of Loudoun.

TJ Admissions Prep

Grades 7-8

Prepare for TJHSST admissions, and learn to craft strong personal statements and problem-solving essays.

Students plan and write answers to Student Portrait Sheet essay prompts and Problem-Solving Essay questions.

Instructors present a framework for efficient, organized, informative, and error-free writing under time constraints.

Students complete two full-length practice tests, and instructors provide written evaluations.

Academies of Loudoun Prep

Grades 7-8

Prepare for the Academies of Loudoun (AOS and AET) admissions exam.

Students review content for each of the sections of the STEM Thinking Skills Assessment and learn effective test-taking strategies. Students also prepare for the Writing Assessment.

Students take two full-length practice tests and receive a written evaluation.

Fall Online TJHSST Prep

Prepare for TJHSST admissions online:

fairfaxcollegiate.com/online-tjhsst

Fall Online ACL Prep

Prepare for the Academies of Loudoun admissions exam online:

fairfaxcollegiate.com/online-acl

HIGH SCHOOL LEVEL COURSES

fairfaxcollegiate.com/high-school

Get ready for high school academic challenges including the PSAT and SAT, advanced math courses, academic writing, and college prep.

SAT Prep

Grades 10-12

Prepare for the math and the reading and writing sections of the digital SAT.

Instructors lead students through *The Official Digital SAT Study Guide*. Topics include SAT question types, test strategy, algebra, geometry, synthesizing information, inference, and rhetoric.

Students complete three official practice SAT tests, and instructors write suggestions for improvement.

PSAT/NMSQT Prep

Grades 9-11

Get ready for the qualifying test for the National Merit Scholarship Program.

The math review covers algebra, graphical representations, and statistics. The reading and writing review emphasizes grammar, mechanics, inferences, and rhetoric.

Students complete two official practice PSAT/NMSQT tests, and instructors write suggestions for improvement.

Intro to Algebra II

Grades 8-11

Prepare for high school Algebra II

Topics include factoring/quadratics, polynomial functions, radicals, exponential/logarithmic functions, rational functions, and sequences/series.

Intro to Precalculus

Grades 9-12

Make the transition to advanced high school-level math with confidence.

Topics include polynomial and rational functions, exponential and logarithmic functions, trigonometric and polar functions, and functions involving parameters/vectors/matrices.

Intro to Computer Science

Grades 9-12

Explore Java concepts needed for success in high school Comp Sci.

The course builds from beginning topics such as keywords, variables, conditionals, and loops to advanced topics such as object-oriented programming, polymorphism, and Java GUI programming.

Academic Writing

Grades 9-12

Experience a small-group, academic writing seminar.

Students write and revise short essays and learn academic editorial styles. Assignments introduce sentence expansion, notetaking, single-paragraph outlines, the writing process, and multi-paragraph organization.

College Prep Workshop

Grades 10-12

Select colleges, strengthen applications, and write compelling essays.

This course is taught as a seminar. Students present their college admission goals and positioning strategies, brainstorm essay topics and approaches, and write, discuss, and revise admission essays.

School Year SAT Prep

Prepare in-person for the digital SAT.

Course sections meet at McLean High School and Chantilly High School:

fairfaxcollegiate.com/sat-prep

Summer Math Online

This summer prepare online for high school math and CS courses:

- **Intro to Algebra**
- **Intro to Geometry**
- **Intro to Algebra II**
- **Intro to Precalculus**
- **Intro to Calculus**
- **SAT Math Prep**
- **Intro to Computer Science**
- **Python Programming**

Morning and evening classes available at fairfaxcollegiate.com/math-online

ASHBURN AND CHANTILLY SCHEDULES

Ashburn: Loudoun School for Advanced Studies, 20577 Ashburn Rd., Ashburn, VA, 20147

Session I: Jun 16-Jun 27

Morning
Action Films 3-4
Chemistry Concepts 3-4
Minecraft Modding 3-4
Creative Writing 5-6
Flight Simulators 5-6
The Human Body 5-6
Arduino 7-9
Biomedical Engineering 7-9
Blender 7-9
Reading for Meaning 7-9
SAT Prep 10-12

Afternoon
Advanced Writing 3-4
Mobile Robotics 3-4
Space Exploration 3-4
3D Modeling 5-6
Filmmaking 5-6
Raspberry Pi 5-6
Academies of Loudoun Prep 7-8
Digital Cinema 7-9
Flight School 7-9
Neuroscience 7-9
Intro to Algebra II 8-11

Session II: Jun 30-Jul 11

Morning
Claymation 3-4
MicroBit 3-4
Writing and Revising 3-4
Elementary Debate 5-6
Intro to 3D Printing 5-6
Problem Solving 5-6
Drones 7-9
Forensic Science 7-9
Godot 7-9
Writers' Workshop 7-9
College Prep Workshop 10-12

Afternoon
Confident Speaking 3-4
Hands-On Science 3-4
Virginia Math 3-4
GameMaker Studio 5-6
Intro to Drones 5-6
Writing Skills and Grammar 5-6
3D Printing 7-9
Middle School Debate 7-9
TJ Admissions Prep 7-8
Virginia Algebra 7-9
SAT Prep 10-12

Session III: Jul 14-Jul 25

Morning
Conversation Club 3-4
Intro to MakeCode 3-4
Word Problems 3-4
Intro to Virtual Reality 5-6
Public Speaking 5-6
Strategic Reading 5-6
Artificial Intelligence 7-9
Driving School 7-9
Robotics Combat 7-9
Virginia Pre-Algebra 6-8
SAT Prep 10-12

Afternoon
Robotics Zoo 3-4
Spy Science 3-4
Writing Fundamentals 3-4
Driving Simulators 5-6
Intro to Python 5-6
Virginia Math 5-6
Academies of Loudoun Prep 7-8
Analytic Writing 7-9
Mock Trial 7-9
Virtual Reality 7-9
PSAT/NMSQT Prep 9-11

Session IV: Jul 28-Aug 8

Morning
AAP Math 3-4
Buildings and Bridges 3-4
Mobile Robotics 3-4
Detective Science 5-6
MakeCode 5-6
Writing for Middle School 5-6
Animal Physiology 7-9
Model UN 7-9
Python 7-9
Virginia Geometry 7-9
Academic Writing 9-12

Afternoon
Reading Reinforcement 3-4
Scratch 3-4
Storytelling 3-4
MathCounts and MOEMS 5-6
Minecraft and Python 5-6
Robotics Olympiad 5-6
Academies of Loudoun Prep 7-8
Aerospace Engineering 7-9
Medical Science 7-9
Writing for High School 7-9
SAT Prep 10-12

Session V: Aug 11-Aug 15

Morning
Fractions and Decimals 3-4
Scratch Movies 3-4
The Solar System 3-4
Intro to Improv 5-6
MakeCode 5-6
Paragraphs 5-6
Godot 7-9
Intro to Geometry 7-9
Intro to Pre-Algebra 6-8
The Human Brain 7-9

Afternoon
Intro to MakeCode 3-4
Persuasive Speaking 3-4
Sentences 3-4
Decimals and Integers 5-6
GameMaker Studio 5-6
Intro to Anatomy 5-6
Essays 7-9
Intro to Algebra 7-9
Presentations 7-9
Python Power Week 7-9

Chantilly: St. Timothy Catholic School, 13809 Poplar Tree Rd., Chantilly, VA 20151

Session I: Jun 16-Jun 27

Morning
Confident Speaking 3-4
Scratch 3-4
Writing and Revising 3-4
GameMaker Studio 5-6
Intro to Drones 5-6
Virginia Math 5-6
Aerospace Engineering 7-9
Digital Cinema 7-9
Forensic Science 7-9
Writing for High School 7-9
Academic Writing 9-12

Afternoon
Claymation 3-4
Spy Science 3-4
Virginia Math 3-4
Architectural Design 5-6
Minecraft and Python 5-6
Writing Skills and Grammar 5-6
Drones 7-9
Godot 7-9
Middle School Debate 7-9
Virginia Geometry 7-9
SAT Prep 10-12

Session II: Jun 30-Jul 11

Morning
Buildings and Bridges 3-4
Minecraft Modding 3-4
Word Problems 3-4
Creative Writing 5-6
Elementary Debate 5-6
Intro to Python 5-6
Arduino 7-9
Competitive Robotics 7-9
Photography 7-9
Writers' Workshop 7-9
SAT Prep 10-12

Afternoon
Intro to MakeCode 3-4
Storytelling 3-4
Writing Fundamentals 3-4
Filmmaking 5-6
IAAT Prep 5-6
Robotics Olympiad 5-6
Animal Physiology 7-9
Model UN 7-9
Python 7-9
SAT Math 7-9
Intro to Algebra II 8-11

Session III: Jul 14-Jul 25

Morning
AAP Math 3-4
MicroBit 3-4
Space Exploration 3-4
3D Modeling 5-6
Stop-Motion Animation 5-6
Strategic Reading 5-6
Blender 7-9
Medical Science 7-9
Middle School Debate 7-9
Virginia Geometry 7-9
College Prep Workshop 10-12

Afternoon
Advanced Writing 3-4
Conversation Club 3-4
Mobile Robotics 3-4
Detective Science 5-6
GameMaker Studio 5-6
MakeCode 5-6
Biomedical Engineering 7-9
Computer Home Labs 7-9
TJ Admissions Prep 7-8
Writing for High School 7-9
SAT Prep 10-12

Session IV: Jul 28-Aug 8

Morning
Action Films 3-4
Confident Speaking 3-4
Virginia Math 3-4
Chem Workshop 5-6
Intro to Virtual Reality 5-6
Writing for Middle School 5-6
3D Printing 7-9
Mock Trial 7-9
Robotics Combat 7-9
Virginia Algebra 7-9
SAT Prep 10-12

Afternoon
Hands-On Science 3-4
Reading Reinforcement 3-4
Robotics Zoo 3-4
Elementary Debate 5-6
Intro to 3D Printing 5-6
Virginia Math 5-6
Artificial Intelligence 7-9
Neuroscience 7-9
Reading for Meaning 7-9
Virtual Reality 7-9
PSAT/NMSQT Prep 9-11

Visit **fairfaxcollegiate.com** for additional information about each course, including a detailed syllabus and a schedule of available sessions and locations for a given course.

MCLEAN AND RESTON SCHEDULES

McLean: Lutheran Church of the Redeemer, 1545 Chain Bridge Rd., McLean, VA 22101

Session III: Jul 14-Jul 25

Morning
Mobile Robotics 3-4
Word Problems 3-4
Chem Workshop 5-6
Elementary Debate 5-6
Writing for Middle School 5-6
Digital Cinema 7-9
TJ Admissions Prep 7-8
Virginia Algebra 7-9

Afternoon
Chemistry Concepts 3-4
Writing and Revising 3-4
Minecraft and Python 5-6
Problem Solving 5-6
Robotics Engineering 5-6
Model UN 7-9
Virginia Geometry 7-9
Writers' Workshop 7-9

Session IV: Jul 28-Aug 8

Morning
Buildings and Bridges 3-4
Conversation Club 3-4
MathCounts and MOEMS 5-6
Public Speaking 5-6
Raspberry Pi 5-6
Analytic Writing 7-9
Photography 7-9
Virginia Pre-Algebra 6-8

Afternoon
AAP Math 3-4
MicroBit 3-4
Architectural Design 5-6
The Human Body 5-6
Writing Skills and Grammar 5-6
Middle School Debate 7-9
Python 7-9
TJ Admissions Prep 7-8

Session V: Aug 11-Aug 15

Morning
Fractions and Decimals 3-4
Scratch Movies 3-4
The Solar System 3-4
Intro to Improv 5-6
MakeCode 5-6
Paragraphs 5-6
Intro to Geometry 7-9
Intro to Pre-Algebra 6-8
The Human Brain 7-9

Afternoon
Intro to MakeCode 3-4
Persuasive Speaking 3-4
Sentences 3-4
Decimals and Integers 5-6
GameMaker Studio 5-6
Intro to Anatomy 5-6
Essays 7-9
Intro to Algebra 7-9
Python Power Week 7-9

Reston: Edlin School, 10742 Sunset Hills Rd., Reston, VA 20190

Session I: Jun 16-Jun 27

Morning
Conversation Club 3-4
MicroBit 3-4
Writing Fundamentals 3-4
MathCounts and MOEMS 5-6
Elementary Debate 5-6
Robotics Olympiad 5-6
Analytic Writing 7-9
Neuroscience 7-9
SAT Math 7-9
Virtual Reality 7-9

Afternoon
Hands-On Science 3-4
Mobile Robotics 3-4
Word Problems 3-4
Filmmaking 5-6
Intro to Virtual Reality 5-6
Strategic Reading 5-6
Artificial Intelligence 7-9
Mock Trial 7-9
TJ Admissions Prep 7-8
Virginia Pre-Algebra 6-8

Session II: Jun 30-Jul 11

Morning
AAP Math 3-4
Action Films 3-4
Scratch 3-4
Raspberry Pi 5-6
The Human Body 5-6
Writing for Middle School 5-6
AMC Contest Math 7-9
Middle School Debate 7-9
Robotics Combat 7-9
Writing for High School 7-9

Afternoon
Reading Reinforcement 3-4
Robotics Zoo 3-4
Space Exploration 3-4
Chem Workshop 5-6
GameMaker Studio 5-6
Problem Solving 5-6
Blender 7-9
Computer Home Labs 7-9
Medical Science 7-9
Virginia Geometry 7-9

Session III: Jul 14-Jul 25

Morning
Advanced Writing 3-4
Intro to MakeCode 3-4
Storytelling 3-4
Architectural Design 5-6
Minecraft and Python 5-6
Writing Skills and Grammar 5-6
Aerospace Engineering 7-9
Competitive Robotics 7-9
Model UN 7-9
Virginia Algebra 7-9

Afternoon
Buildings and Bridges 3-4
Confident Speaking 3-4
Writing and Revising 3-4
Elementary Debate 5-6
IAAT Prep 5-6
Robotics Olympiad 5-6
Forensic Science 7-9
Photography 7-9
Python 7-9
Reading for Meaning 7-9

Session IV: Jul 28-Aug 8

Morning
Claymation 3-4
Minecraft Modding 3-4
Virginia Math 3-4
Creative Writing 5-6
Filmmaking 5-6
Robotics Engineering 5-6
Animal Physiology 7-9
Godot 7-9
TJ Admissions Prep 7-8
Virginia Pre-Algebra 6-8

Afternoon
Chemistry Concepts 3-4
Spy Science 3-4
Writing Fundamentals 3-4
GameMaker Studio 5-6
Intro to Python 5-6
Virginia Math 5-6
Arduino 7-9
Digital Cinema 7-9
Middle School Debate 7-9
Writers' Workshop 7-9

Session V: Aug 11-Aug 15

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Intro to MakeCode 3-4
Persuasive Speaking 3-4
Sentences 3-4
Decimals and Integers 5-6
GameMaker Studio 5-6
Intro to Anatomy 5-6
Essays 7-9
Intro to Algebra 7-9
Presentations 7-9
Python Power Week 7-9

Afternoon
Fractions and Decimals 3-4
Scratch Movies 3-4
The Solar System 3-4
Intro to Improv 5-6
MakeCode 5-6
Paragraphs 5-6
Godot 7-9
Intro to Geometry 7-9
Intro to Pre-Algebra 6-8
The Human Brain 7-9

TYSONS AND VIENNA SCHEDULES

Tysons BASIS Independent McLean, 8000 Jones Branch Dr., McLean, VA 22102

Session I: Jun 16-Jun 27

Morning
Buildings and Bridges 3-4
Minecraft Modding 3-4
Space Exploration 3-4
Flight Simulators 5-6
Robotics Engineering 5-6
Writing for Middle School 5-6
3D Printing 7-9
Animal Physiology 7-9
Middle School Debate 7-9
Virginia Algebra 7-9
Academic Writing 9-12
Intro to Algebra II 8-11

Afternoon
Chemistry Concepts 3-4
Reading Reinforcement 3-4
Robotics Zoo 3-4
Elementary Debate 5-6
IAAT Prep 5-6
Intro to 3D Printing 5-6
Arduino 7-9
Flight School 7-9
Robotics Combat 7-9
Writers' Workshop 7-9
Intro to Computer Science 9-12
SAT Prep 10-12

Session II: Jun 30-Jul 11

Morning
Advanced Writing 3-4
Claymation 3-4
MicroBit 3-4
3D Modeling 5-6
MathCounts and MOEMS 5-6
MakeCode 5-6
Digital Cinema 7-9
Driving School 7-9
Forensic Science 7-9
Reading for Meaning 7-9
Intro to Precalculus 9-12
SAT Prep 10-12

Afternoon
Conversation Club 3-4
Mobile Robotics 3-4
Spy Science 3-4
Driving Simulators 5-6
Stop-Motion Animation 5-6
Writing Skills and Grammar 5-6
Artificial Intelligence 7-9
Biomedical Engineering 7-9
Mock Trial 7-9
Virginia Pre-Algebra 6-8
College Prep Workshop 10-12
Intro to Algebra II 8-11

Session III: Jul 14-Jul 25

Morning
Action Films 3-4
Minecraft Modding 3-4
Virginia Math 3-4
Creative Writing 5-6
Flight Simulators 5-6
Public Speaking 5-6
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AMC Contest Math 7-9
Godot 7-9
Neuroscience 7-9
Intro to Computer Science 9-12
SAT Prep 10-12

Afternoon
AAP Math 3-4
Hands-On Science 3-4
Writing Fundamentals 3-4
GameMaker Studio 5-6
Intro to 3D Printing 5-6
Virginia Math 5-6
Analytic Writing 7-9
Flight School 7-9
Middle School Debate 7-9
Python 7-9
Academic Writing 9-12
Intro to Precalculus 9-12

Session IV: Jul 28-Aug 8

Morning
Intro to MakeCode 3-4
Storytelling 3-4
Writing and Revising 3-4
Elementary Debate 5-6
Minecraft and Python 5-6
Problem Solving 5-6
Biomedical Engineering 7-9
Driving School 7-9
Medical Science 7-9
Virginia Geometry 7-9
College Prep Workshop 10-12
PSAT/NMSQT Prep 9-11

Afternoon
Confident Speaking 3-4
Scratch 3-4
Word Problems 3-4
3D Modeling 5-6
Driving Simulators 5-6
Strategic Reading 5-6
Aerospace Engineering 7-9
Model UN 7-9
Virginia Algebra 7-9
Writing for High School 7-9
Intro to Algebra II 8-11
SAT Prep 10-12

Vienna: Green Hedges School, 415 Windover Ave. NW, Vienna, VA 22180

Session I: Jun 16-Jun 27

Morning
Action Films 3-4
Advanced Writing 3-4
Detective Science 5-6
MakeCode 5-6
Public Speaking 5-6
AMC Contest Math 7-9
Medical Science 7-9
Model UN 7-9
Python 7-9

Afternoon
AAP Math 3-4
Storytelling 3-4
Chem Workshop 5-6
Creative Writing 5-6
Intro to Python 5-6
Blender 7-9
Computer Home Labs 7-9
Photography 7-9
Reading for Meaning 7-9

Session II: Jun 30-Jul 11

Morning
Hands-On Science 3-4
Virginia Math 3-4
Architectural Design 5-6
Minecraft and Python 5-6
Strategic Reading 5-6
Godot 7-9
TJ Admissions Prep 7-8
Virginia Geometry 7-9
Virtual Reality 7-9

Afternoon
Confident Speaking 3-4
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Intro to Virtual Reality 5-6
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Virginia Math 5-6
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Analytic Writing 7-9
Neuroscience 7-9
Virginia Algebra 7-9

Session III: Jul 14-Jul 25

Morning
Reading Reinforcement 3-4
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Filmmaking 5-6
Intro to Python 5-6
Animal Physiology 7-9
Arduino 7-9
Artificial Intelligence 7-9
SAT Math 7-9

Afternoon
Scratch 3-4
Spy Science 3-4
Raspberry Pi 5-6
The Human Body 5-6
Writing for Middle School 5-6
Mock Trial 7-9
Robotics Combat 7-9
Virginia Pre-Algebra 6-8
Writers' Workshop 7-9

Session IV: Jul 28-Aug 8

Morning
Minecraft Modding 3-4
Space Exploration 3-4
Robotics Olympiad 5-6
Writing Skills and Grammar 5-6

Afternoon
Advanced Writing 3-4
Mobile Robotics 3-4
MakeCode 5-6
Stop-Motion Animation 5-6

SCHOOL YEAR AND ONLINE PROGRAMS

School Year SAT Prep

Prepare in-person for the digital SAT.

Course sections meet at McLean High School and Chantilly High School:

fairfaxcollegiate.com/sat-prep

School Year Math

Get in-person math support and acceleration at the **Virginia School of Math:**

fairfaxcollegiate.com/virginia-math

Summer Math Online

This summer prepare online for high school math and CS courses:

- **Intro to Algebra**
- **Intro to Geometry**
- **Intro to Algebra II**
- **Intro to Precalculus**
- **Intro to Calculus**
- **SAT Math Prep**
- **Intro to Computer Science**
- **Python Programming**

Morning and evening classes available at fairfaxcollegiate.com/math-online

Fall Online TJHSST Prep

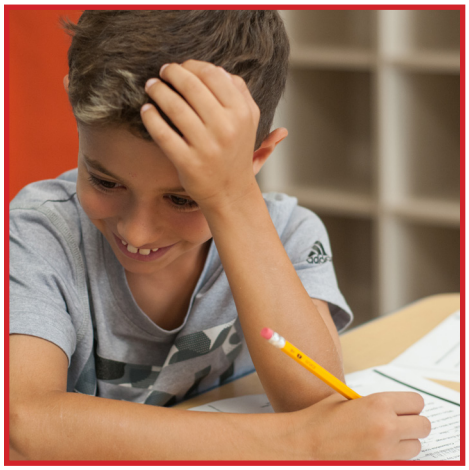
Prepare for TJHSST admissions online:

fairfaxcollegiate.com/online-tjhsst

Fall Online ACL Prep

Prepare for the Academies of Loudoun admissions exam online:

fairfaxcollegiate.com/online-acl



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SUMMER 2025

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MATH • WRITING • SCIENCE • TEST PREP
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Chantilly
St. Timothy Catholic School
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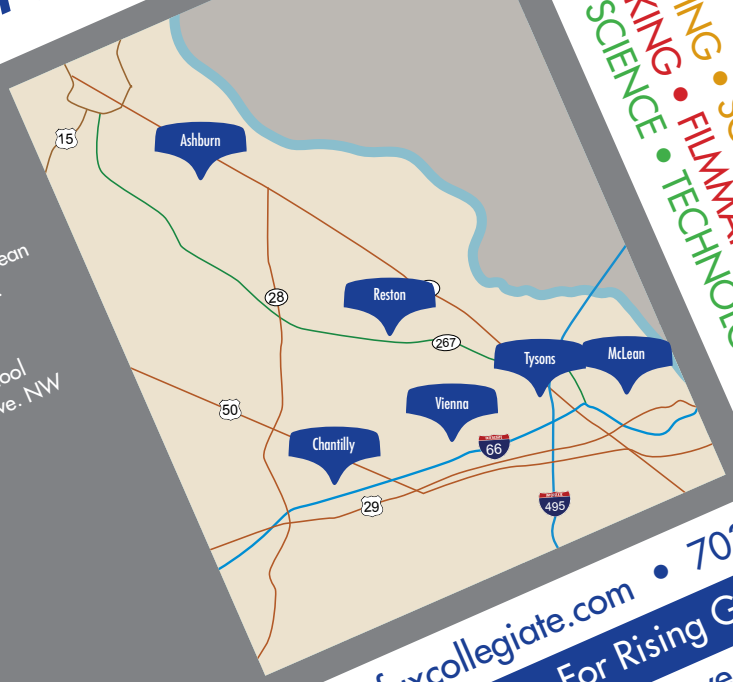
McLean
Lutheran Church of the Redeemer
1545 Chain Bridge Rd.

Reston
Edlin School
10742 Sunset Hills Rd.

Tysons
BASIS Independent McLean
8000 Jones Branch Dr.

Vienna
Green Hedges School
415 Windover Ave. NW



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Have Fun and Learn!