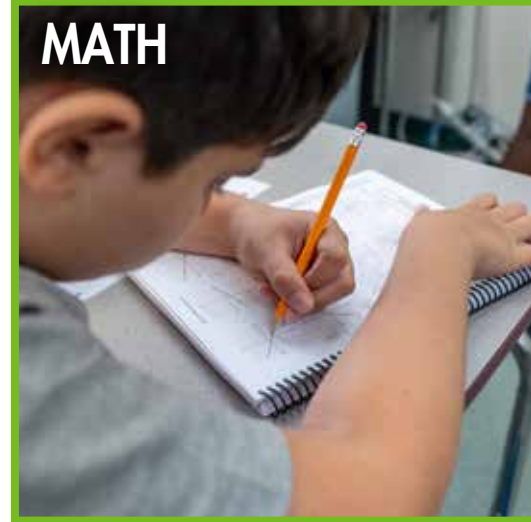


**FOR
RISING
GRADES 4-12**



**2026
SUMMER**

MATH



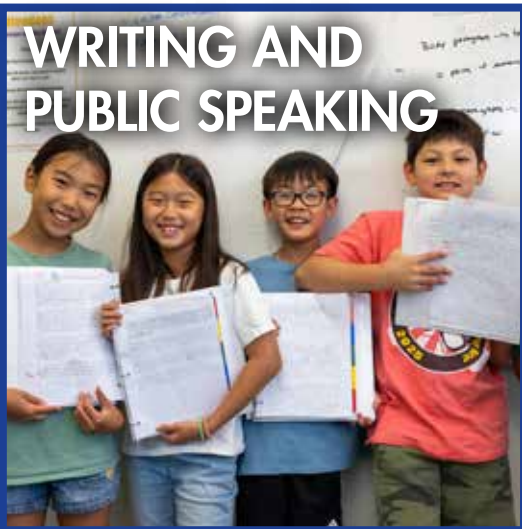
**SCIENCE AND
ENGINEERING**



FILMMAKING



**WRITING AND
PUBLIC SPEAKING**



**AI, GAME DEV,
AND TECH**



SAT AND TJ PREP



**IN-PERSON
AND
ONLINE**

FAIRFAX COLLEGIATE SUMMER 2026

This summer your child can have fun and learn!

Since 1993, Fairfax Collegiate has provided challenging and engaging summer courses in math, writing, science, test prep, public speaking, filmmaking, engineering, AI, game dev, and tech.

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. Each year, thousands of students complete our summer courses.

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

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SUMMER 2026 LOCATIONS

Ashburn

Loudoun School for Advanced Studies
20577 Ashburn Rd.

Chantilly

St. Timothy Catholic School
13809 Poplar Tree Rd.

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



PROGRAM OVERVIEW

SUMMER 2026 SESSIONS AND HOURS

Session	Start Date	End Date	Duration	Half Day	Full Day
In-Person I	June 22	July 2	9 days*	\$540	\$850
In-Person II	July 6	July 17	10 days	\$595	\$925
In-Person III	July 20	July 31	10 days	\$595	\$925
In-Person IV	August 3	August 14	10 days	\$595	\$925
In-Person V	August 17	August 21	5 days	\$315	\$495
Online A	July 13	July 24	10 days	\$450	
Online B	July 27	August 7	10 days	\$450	
Online C	August 10	August 21	10 days	\$450	

*Independence Day Observed July 3

**The fee for AM or PM Extended Care is \$120 per session or \$15 per day.

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

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

In-Person 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.

Online Math and Test Prep

9:00 a.m. to 12:00 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 2026. 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 May 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 May 1, Fairfax Collegiate will refund program fees less the non-refundable deposit of \$100 per session. After May 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

Prepare in-person or online for fall math courses.

Our classes feature diagnostic tests, daily one-on-one coaching, small group instruction, enrichment activities, and real-world applications.

Virginia Math 4-6

Grades 4-6

Reinforce core Math 4, Math 5, and Math 6 concepts in a small group setting.

Topics include multiplication, division, fractions, decimals, proportions, measurement, geometry, and statistics.

Gateway to Algebra

Grades 5-6

Get on the seventh-grade Algebra I track.

Pre-algebra topics include integers, variables, exponents, expressions, equations, and linear functions.

The course includes a review of other topics on the Math 7 SOL, the qualifying exam for seventh-grade Algebra I.

Problem Solving

Grades 4-6

Learn strategies for solving challenging word problems.

Solve real-world problems by drawing diagrams, spotting patterns, making tables, and applying logic.

Math for Middle School

Grades 6-8

In-Person or Online

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.

Intro to Algebra

Grades 7-9

In-Person or Online

Prepare for middle school or high school Algebra I.

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

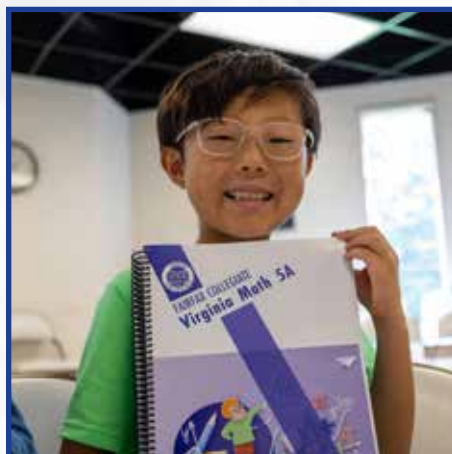
Intro to Geometry

Grades 7-9

In-Person or Online

Prepare for high-school-level Geometry.

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





Intro to Algebra II

Grades 9-11

In-Person or Online

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 10-12

In-Person or Online

Prepare for high school Precalculus or AP Precalculus.

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

Intro to Calculus

Grades 10-12

In-Person or Online

Prepare for high school AP Calculus AB or AP Calculus BC.

Topics include limits, continuity, differentiation, inverse functions, integration, and real-world applications.

ONE-WEEK COURSES

Aug 17-Aug 21

Virginia Math Bootcamp

Grades 4-6

Get ready for upper-elementary math courses.

Pre-Algebra Bootcamp

Grades 6-8

Get ready for Math 7 or Math 8.

Algebra Bootcamp

Grades 7-9

Get ready for middle school or high school Algebra I.

Geometry Bootcamp

Grades 7-9

Get ready for high-school-level Geometry.

Algebra II Bootcamp

Grades 9-11

Get ready for high school Algebra II.



WRITING

Write every day, learn the writing process, get individual coaching, and share your writing.

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

Writing Fundamentals

Grades 4-5

Write effective sentences.

Learn the function and structure of sentences and how to diagram sentences.

Use conjunctions to expand sentences and express complex ideas.

Writing Skills & Grammar

Grades 4-6

Write effective sentences and organized paragraphs.

Expand and diagram sentences, and represent sentences as notes.

Plan, organize, draft, revise, and copy edit paragraphs.

Reading for Fun

Grades 4-6

Read, discuss, and write about classic short stories and novels.

Develop your love of reading physical, printed books. Discover new favorite authors, genres, and themes. Create a list of books to read independently.

Creative Writing

Grades 4-6

Write, share, discuss, and revise essays, short stories, plays, and poems.

Write daily. Revise drafts based on instructors' comments. Publish works in a class anthology, and submit works to writing contests.

Writers' Workshop

Grades 7-9

Write, share, discuss, and revise short stories, poems, articles, and essays.

Learn the entire writing process including brainstorming, outlining, drafting, revising, sharing, and editing.

Reading for Meaning

Grades 7-9

Practice close reading, note-taking, and summarizing.

Read short stories, journalistic writing, essays, and poetry.

Use literary tools including compare/contrast, cause/effect, and prediction to analyze texts.

Writing for Middle School

Grades 5-6

Plan, draft, revise, and edit five-paragraph essays.

Expand sentences, take notes, create paragraph outlines, write drafts, revise drafts, and copy edit final drafts.





Writing for High School

Grades 7-9

Learn techniques for planning, organizing, drafting, and revising high-school level writing.

Write, share, discuss, and revise persuasive, expository, and narrative essays.

Analytic Writing

Grades 7-9

Evaluate and construct written arguments.

Read, discuss, and critique essays, speeches, and articles.

Plan, write, discuss, and revise analytic essays about topics of personal interest.

Academic Writing

Grades 9-12

Explore the elements of style and how to enter the academic conversation.

Review elementary rules of usage, principles of composition, and advice on writing style.

Learn the convention of academic writing including summarizing, quoting, responding, anticipating objections, and explaining significance.

Personal Essays

Grades 9-12

Read, discuss, draft, and workshop personal essays.

Read and discuss literary and journalistic personal essays by major authors.

Plan, draft, and workshop your own personal essays, which may include essays for future college applications.

ONE-WEEK COURSES

Aug 17-Aug 21

Paragraphs

Grades 4-6

Practice writing five-paragraph essays.

Short Essays

Grades 7-9

Read and write essays about topics of personal interest.



SCIENCE

Learn biology, chemistry, and physics through hands-on labs.

Chem Workshop

Grades 4-6

Mix chemicals and see what happens.

Make oobleck, launch pop rockets, build marble roller coasters, create density art, test pH, and experiment with elephant toothpaste and Coke and Mentos.

Investigate matter, atoms, energy, chemical reactions, density, and acids and bases.

Learn how scientists record data, look for patterns, and explore big questions.

Hands-On Science

Grades 4-6

Experiment like a real scientist.

Test plant growth, measure heart rates, discover bacteria, mix acids and bases, create oobleck, build bridges, design parachutes, and launch balloon rockets.

Make observations, keep a science notebook, and use the scientific method.

Spy Science

Grades 4-6

Learn the science behind espionage.

Dive into code breaking, disguises, fingerprinting, forensic tests, periscopes, and alarms. Investigate clues, test gadgets, and complete missions.

Create ciphers, analyze handwriting, test mystery powders, make invisible ink, build simple surveillance tools, and practice using Morse code.

Forensic Science

Grades 7-9

Solve crimes with science.

Explore fingerprinting, handwriting analysis, microscopy, chemical testing, blood typing, blood spatter analysis, tool impression matching, and ink chromatography.

Document crime scenes, test unknown substances, analyze evidence, and compare your findings to real forensic investigations.





Neuroscience

Grades 7-9

Investigate how your brain works.

Model the brain and neurons, explore EEG patterns, test reaction times, measure muscles' electrical signals, and dissect a sheep brain.

Learn about brain anatomy, neuron structure, action potentials, nerve fibers, brainwaves, sensory systems, and neurodegenerative diseases.

Medical Science

Grades 7-9

Explore anatomy and physiology.

Diagnose patient cases, test reflexes, track heart rates, explore optical illusions, dissect a sheep's eye, examine blood cells under a microscope, practice suturing, and run simulated lab tests for pathogens and drug trials.

Investigate the musculoskeletal, nervous, digestive, cardiovascular, respiratory, and lymphatic systems.

Animal Physiology

Grades 7-9

Look inside preserved specimens.

Dissect earthworms, grasshoppers, crayfish, perch, frogs, sharks, and rats. Compare body systems and specialized structures.

Reconstruct skeletons and analyze tissues. Explore the musculoskeletal, digestive, respiratory, circulatory, and nervous systems. Investigate how environmental pressures shape physiology.





Speak in front of an audience and build confidence.

Elementary Debate

Grades 4-6

Get started with rhetoric and debate.

Craft arguments and rebuttals about topics that you and your fellow elementary students care about. Listen to be heard, and go head-to-head against classmates with empathy and courtesy.

Public Speaking

Grades 4-6

Speak in front of an audience every day.

Research, outline, write, and present speeches. Construct persuasive arguments. Work on eye contact, body language, word choice, and voice inflection.

Storytelling

Grades 4-6

Engage an audience with a hero and their journey.

Write, recite, and act out your story. Create characters, develop plots, deliver and refine performances, and build confidence.



Middle School Debate

Grades 7-9

Research, write, and persuade.

Debate daily, learn debating rules and etiquette, and craft arguments and rebuttals.

Model UN

Grades 7-9

Negotiate world peace.

Learn about the United Nations and the Security Council. Research, think, write, debate, and negotiate. Act as an ambassador to the UN, and draft resolutions to solve global problems.

Mock Trial

Grades 7-9

Act as a judge, attorney, witness, or jury member to learn about the legal system.

Learn about American courts, civil and criminal trials, due process, and standards of proof. Select jurors, deliver opening statements, examine witnesses, present evidence, make closing arguments, and deliberate verdicts.



ONE-WEEK COURSES

Aug 17-Aug 21

Persuasive Speaking

Grades 4-6

Listen, speak, and influence.

Intro to Improv

Grades 7-9

Think quick, and speak with wit.





Make short films and photos that tell stories and create emotion.

Filmmaking

Grades 4-6

Make short films with your classmates.

Brainstorm ideas, write scripts, draw storyboards, and create shot lists. Cast roles, rehearse scenes, locate costumes and props, and shoot your films.

Use a video camera, tripod, boom mic, and video lights. Edit films on iMovie, and share with family and friends.

Stop-Motion Animation

Grades 4-6

Tell stories with short animated films.

Create a hero out of clay or Legos, and send them on a journey with a plot, conflict, and resolution.

Use still cameras, mics, and Clipchamp to bring characters to life. Share films with family and friends.

Digital Cinema

Grades 7-9

Make films that look professional.

Brainstorm ideas, write scripts, draw storyboards, and create shot lists. Cast roles, rehearse scenes, locate costumes and props, and shoot your films.

Use a cinema camera, prime lens, tripod, boom mic, and video lights to shoot films with high production values. Edit films on iMovie, add music, and share with family and friends.

Photography

Grades 7-9

Tell stories with still images.

Develop artistic and technical skills. Learn composition, exposure, and lighting. Create photos of still life scenes, products, food, portraits, and sports.

Use DSLR cameras, prime lenses, zoom lenses, light sources, reflectors, and modifiers. Edit photos with open source software.

ONE-WEEK COURSES

Aug 17-Aug 21

Intro to Filmmaking

Grades 4-6

Make a short film with classmates.

Short Films

Grades 7-9

Use a cinema camera, boom mic, and video lights to make a short film.





Design 3D models, bridges, airplanes, rockets, and medical devices.

Intro to 3D Printing

Grades 4-6

Get started with 3D printing.

Create digital models using computer-assisted design software, and print models on 3D printers.

Learn about the commercial and industrial applications of 3D printing.

Create objects around themes such as cities, puzzles, and fantasy objects.

3D Modeling

Grades 4-6

Design cool stuff and print it.

Use Autodesk Fusion to design custom keychains, phone stands, cable organizers, and more. Print your objects on 3D printers, and take them home with you.

Experiment with shapes and features, and design objects that look awesome and function in the real world.

Buildings and Bridges

Grades 4-6

Build models of large structures.

Construct towers, bridges, domes, dams, and disaster-ready buildings.

Test materials, evaluate shapes and floorplans, create budgets, and refine blueprints.

Build load-bearing models, experiment with hydraulic mechanisms and waterproofing techniques, and simulate earthquakes.

3D Printing

Grades 7-9

Design and print 3D objects.

Print nameplates, chess pieces, nature-inspired models, scanned objects, and small structures.

Set up, adjust, operate, and maintain 3D printers, and prepare model files.

Biomedical Engineering

Grades 7-9

Invent medical treatments and devices.

Extract DNA, investigate gene therapy, examine organ systems, and develop prosthetics. Print 3D medical parts.

Learn about biochemistry, DNA, protein synthesis, gene expression, genetic engineering, human cells, tissue structure, anatomy, and medical imaging.

Aerospace Engineering

Grades 7-9

Design and build planes and rockets.

Learn Newton's First Law and build paper helicopters. Like the Wright brothers, build a wind tunnel and test airfoils. Build gliders and a model propeller plane.

Learn Newton's Third Law and design a jet engine. Design and build a rocket. Learn about the International Space Station. Build a model solar sail.





Pilot drones or build, program, and operate EV3 robots.

Intro to Drones

Grades 4-6

Pilot drones and learn about their uses.

Fly small drones indoors and outdoors. Use drones to take pictures, capture video, deliver food, find and rescue toy victims, make paintings, and race.

Learn about how drones fly, FAA rules, larger drones, and the future of drones.

Mobile Robotics

Grades 4-6

Assemble and program mobile robots.

Build EV3 robots that move—under operator control or autonomously—such as Taskbot, DragRacerBot, REMBot, and MazeBot.

Learn about robot design, torque, force, mechanical advantage, gear ratios, and EV3 programming.

Robotics Olympiad

Grades 4-6

Build and program robot athletes.

Compete in daily robot athletic challenges. Build EV3 robots that drag race, solve mazes, wrestle, win at rock-paper-scissors, and play soccer.

Learn about robot design, EV3 programming, sensors, motors, gear ratios, navigation, and robot I/O.

Robotics Engineering

Grades 4-6

Use engineering to evolve robots.

Use the engineering process to invent and refine robots such as GolfBot, SpinBot, EducatorBot, TrackBot, and GyroBot.

Learn about torque, force, gear ratios, EV3 programming, sensors, robot vision, treads, and gyroscopes.

Drones

Grades 7-9

Pilot and program drones.

Fly small drones and complete obstacle courses, search and rescue missions, delivery simulations, photo and video assignments, and formation flying exercises.

Learn about FAA regulations. Program drones using a simple block-based language. Complete a multi-stage challenge requiring autonomous flight.

Robotics Combat

Grades 7-9

Battle other robots every day.

Build and fight with combat EV3 robots such as bumpers, jousters, grenadiers, sumo wrestlers, RPS warriors, bluetooth soldiers, and freestylers.

Learn about EV3 programming, sensors, gear ratios, robot I/O, and design tradeoffs.

Competitive Robotics

Grades 7-9

Enter daily robotic contests.

Build competition EV3 robots such as maze solvers, drag racers, trash bots, sumo wrestlers, RPS warriors, Kart racers, and footballers.

Learn about robotic design, EV3 programming, sensors, gear ratios, autonomous navigation, and robot I/O.





Drive cars and fly planes on realistic sims, and explore virtual reality.

Flight Sims

Grades 4-6

Learn to fly on a realistic sim.

Pilot a small one-engine airplane on Microsoft Flight Simulator, and practice level flight, turns, takeoffs, and landings. Make cross-country flights to points of interest in accordance with FAA regulations, and build your flying hours.

Driving Sims

Grades 4-6

Practice street driving and auto racing.

On a realistic sim, practice safe driving on highways, in cities, and on rural roads. Take a driving test and earn an unofficial license.

Move on to racing high-performance autos, driving in bad weather, avoiding accidents, and responding to extreme situations.

Intro to Virtual Reality

Grades 4-6

Discover VR apps and games.

Put on VR goggles and visit ancient cities, travel to other planets, traverse the bottom of the ocean, and navigate the inside of a human cell.

Next, paint and sculpt in 3D, and venture into the world of Minecraft.

Flight School

Grades 7-9

Learn how to become a pilot.

Pilot a small one-engine airplane on Microsoft Flight Simulator and practice level flight, turns, takeoffs and landings. Prepare for the FAA Airman Knowledge Test. Move on to instrument flight, two-engine operation, and flying a jet trainer.

Fighter Combat School

Grades 7-9

Fly and fight on a combat flight sim.

Learn to fly modern military aircraft using DCS World, a realistic combat sim. Study and practice fighter tactics including maneuver, conservation of energy, stealth, ECM, missile targeting, and missile countermeasures. Compete in a top gun tournament.

Virtual Reality

Grades 7-9

Navigate and create VR environments.

Visit global landmarks, soar through space, traverse the ocean floor, and navigate the inside of a human cell. Use the Unity software development platform to program games in VR, and build your own 3D world.

Spaceflight Sims

Grades 7-9

Build rockets and fly space missions.

Explore physics, orbital mechanics, and flight dynamics with three increasingly realistic spaceflight sims: Kerbal Space Program, Reentry, and FlightGear. Build rockets and spacecraft. Plan unmanned and manned missions. Launch rockets and operate spacecraft. Design and fly experimental spacecraft.





Experiment with tiny computers, PCs, and remote servers.

MicroBit Lab

Grades 4-6

Discover hardware and coding.

Use a block-based language to program the MicroBit, a tiny computer.

Create animations, music, mini-games, digital nametags, and LED dice.

Learn about variables, boolean logic, conditional statements, and loops.

Raspberry Pi Lab

Grades 4-6

Make projects with a tiny computer.

Connect the Raspberry Pi to electronic components, add some Python code, and build projects.

Make a game controller, a security camera, a virtual city map, a music box, a digital camera, and a flying birds game. Learn about Python and Linux.

PC Hardware Lab

Grades 7-9

Build, configure, and tinker with PCs.

Assemble gaming PCs, install Windows and Linux, and test performance.

Set up a network, connect to the internet, and configure firewalls.

Assemble a server, install a server OS, set up network attached storage, and run virtual machines.

Take a mock CompTIA A+ exam.

Arduino Lab

Grades 7-9

Prototype hardware devices.

Connect the Arduino microcontroller to other electronics, and program the Arduino using the Arduino IDE.

Build LED dice, a binary counter, a Morse code translator, a lie detector, and a motion-sensing alarm.

Cloud Computing Lab

Grades 9-12

Use remote servers to get work done.

Get started with AWS tutorials exploring cloud concepts, core services, security, and configuration.

Implement a cloud-based website of your own design that does useful work by calling other cloud-based services.

Cybersecurity Lab

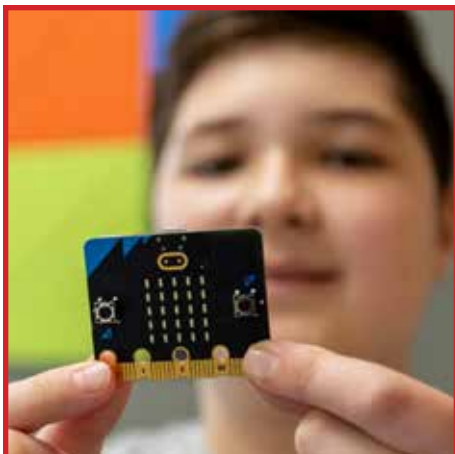
Grades 9-12

Defend against attacks and threats.

Practice with hands-on TryHackMe challenges that present typical cybersecurity scenarios and introduce real tools.

Learn about networks, operating systems, threats, malware, cryptography, web security, monitoring, and incident response.

Take a practice Security+ exam.





Get a hands-on, project-based introduction to Python and AI.

Minecraft and Python

Grades 4-6

Mod Minecraft with Python.

Write simple Python code to make buildings and cities inside of Minecraft. Write Python code to create Minecraft minigames.

Creative AI

Grades 4-6

Tell your own stories with AI.

Imagine a hero, a quest, a villain, other characters, a plot, and a unique setting. Prompt AI models to generate text, images, narration, music, and animations. Combine what the models give you, and edit and tweak your story to make it truly your own.

Intro to Python

Grades 7-9

Get started with Python programming.

Practice using variables, strings, boolean logic, branching, loops, lists, functions, and classes. Write your own 2D games using the Pygame library.

Intro to AI

Grades 7-9

Explore the present and future of AI.

Learn about machine learning, neural networks, and GPT-style AI models. Run ML models on the Hugging Face Hub, and practice prompt engineering on leading AI models. Think and write about how AI may change education, work, and society.

Hands-On AI Lab

Grades 7-9

Investigate how AI works.

Use machine learning to sort pictures, recognize compliments and insults, and play tic-tac-toe. Experiment with neural networks, deep learning, and large language models.

Python Programming

Grades 9-12

Learn Python and some core libraries.

Experiment with data types, lists, dictionaries, loops, classes, and code tests. Complete projects using Python libraries such as pytest, Pygame, Matplotlib, Plotly, and Django.

Artificial Intelligence

Grades 9-12

Get the big picture on AI.

Learn about AI and search, language, and vision. Experiment with machine learning on Hugging Face and Google Colab. Practice prompt engineering on leading AI models. Research a business opportunity or social issue created by AI.





Create game mods and your own 2D and 3D games.

Minecraft Modding

Grades 4-6

Make your own Minecraft world.

Create new blocks, items, creatures, environments, achievements, and events with MCreator.

Go home with your Minecraft mod.

Roblox Studio

Grades 4-6

Create new Roblox experiences.

Build obstacles and challenges. Design your own interactive worlds. Use Lua scripts to add movement, scoring, and special effects.

Go home with your Roblox projects.

Intro to Game Dev

Grades 4-6

Get started making games.

Team up with classmates and create a shared vision for a game.

Learn GameMaker, create characters, levels, and sounds, and code game play. Create artwork with GIMP.

Play, test, and improve your game.

2D Game Dev

Grades 7-9

Develop a polished 2D game.

Team up with classmates and create a shared vision for a game.

Learn GameMaker, create 2D game levels, and use visual or scripting languages to code your game. Create artwork with GIMP.

Play, test, and improve your game.

Go home with your game.

3D Game Dev

Grades 7-9

Develop a polished 3D game.

Team up with classmates and create a shared vision for a game.

Learn Godot and create 3D levels, model simple environments, script player controls, and refine visual style. Create artwork with GIMP and Blender.

Play, test, and improve your game.

Go home with your game.

3D Animation

Grades 7-9

Create 3D art for games.

Learn Blender basics.

Design game-style models such as characters, tools, vehicles, and scenery.

Create game-style animations such as movement loops, cinematic moments, walking cycles, action poses, and camera moves.

Go home with a digital portfolio.

ONE-WEEK COURSES

Aug 17-Aug 21

Minecraft Redstone

Grades 4-6

Build smarter, cooler creations.

Intro to GameMaker

Grades 4-6

Code your first game.

Intro to Godot

Grades 7-9

Step up to 3D game dev.



Prepare for admission to TJHSST or the Academies of Loudoun.

TJHSST Admissions Prep

Grades 7-8

In-Person or Online

Prepare for TJHSST admissions.

Practice writing personal statements and problem-solving essays for TJHSST admissions.

Learn a framework for efficient, organized, informative, and correct writing under time constraints.

Find out about TJHSST from TJHSST insiders.

Advanced TJHSST Prep

Grades 7-8

In-Person or Online

Write your way to TJHSST.

Get extra practice writing TJHSST admissions personal statements and problem-solving essays under time pressure.

Obtain formal, rubric-based feedback from the instructor for each essay.

Complete optional revision assignments.

Academies of Loudoun Prep

Grades 7-8

In-Person or Online

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

Review content for each of the sections of the STEM Thinking Skills Assessment.

Learn effective test-taking strategies and prepare for the Writing Assessment.

Take two full-length practice tests and obtain a written evaluation.



Fall TJHSST Prep

Prepare for TJHSST admissions:
fairfaxcollegiate.com/fall-tjhsst

Fall Online ACL Prep

Prepare for Academies of Loudoun admissions:
fairfaxcollegiate.com/fall-acl



Get ready for the SAT, PSAT, and ACT.

Complete SAT Prep

Grades 10-12

In-Person or Online

Be confident on test day.

Use our proprietary *SAT Strategy Guide* to design an individual study plan.

Your plan will integrate content review, problem discussions, *The Official SAT Study Guide*, SAT practice problems, and key online resources.

Retake the course for free if you are not satisfied with your improvement.

SAT Prep: The Hard Problems

Grades 10-12

In-Person or Online

Get your SAT score above 1400.

Practice exclusively on “Hard Problems” as designated by the College Board.

Refine your test strategy and learn advanced test tactics.

Retake the course for free if you are not satisfied with your improvement.

PSAT/NMSQT Prep

Grades 9-11

In-Person or Online

Get ready for the PSAT, the qualifying test for National Merit Scholarships.

Review PSAT content, discuss practice questions, and take practice tests.

Commit to a long-term plan to raise your future SAT score while there is still time.

Complete ACT Prep

Grades 10-12

In-Person or Online

Prepare for the ACT.

Prepare for the English, mathematics, reading, science, and writing sections of the ACT.

Become familiar with question types, take practice tests, and refine tactics and strategies.

ONE-WEEK COURSES

Aug 17-Aug 21

SAT Math Bootcamp

Grades 10-12

Prepare for the math section of the SAT.

SAT Verbal Bootcamp

Grades 10-12

Prepare for the reading and writing section of the SAT.



School Year SAT Prep

Prepare for the SAT, PSAT, and ACT.

Classes meet at local public high schools in the afternoon and evening:

fairfaxcollegiate.com/sat-prep

SUMMER ONLINE MATH AND TEST PREP

fairfaxcollegiate.com/online



Prepare Online from Anywhere

If you can't prepare in-person, prepare online from anywhere.

Classes meet synchronously over Zoom, and online students use the same workbooks that students use in-person.

We've worked with thousands of students online since 2020, and we've figured out how to keep our students engaged and learning.

Online courses meet from 9:00 AM to 12:00 PM every weekday for two weeks. We will offer each course three times. The fee for each two-week course is \$450.

Register now at fairfaxcollegiate.com.

2026 Summer Online Math and Test Prep

Online A: Jul 13-Jul 24
9:00 AM - 12:00 PM

Math
Math for Middle School 6-8
Intro to Algebra 7-9
Intro to Geometry 7-9
Intro to Algebra II 9-11
Intro to Precalculus 10-12
Intro to Calculus 10-12

Test Prep
Academies of Loudoun Prep 7-8
TJ Admissions Prep 7-8
Advanced TJ Essay Writing 7-8
PSAT-NMSQT Prep 9-11
Complete SAT Prep 10-12
SAT Prep: The Hard Problems 10-12
Complete ACT Prep 10-12

Online B: Jul 27-Aug 7
9:00 AM - 12:00 PM

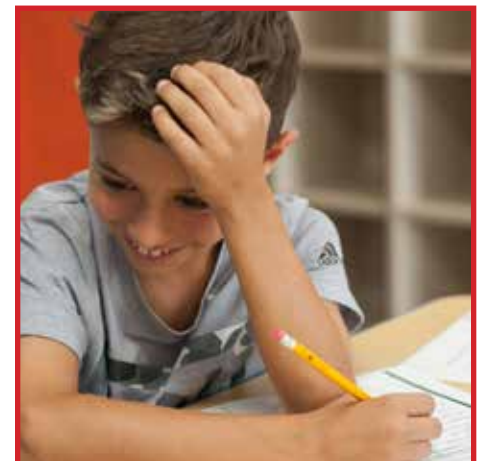
Math
Math for Middle School 6-8
Intro to Algebra 7-9
Intro to Geometry 7-9
Intro to Algebra II 9-11
Intro to Precalculus 10-12
Intro to Calculus 10-12

Test Prep
Academies of Loudoun Prep 7-8
TJ Admissions Prep 7-8
Advanced TJ Essay Writing 7-8
PSAT-NMSQT Prep 9-11
Complete SAT Prep 10-12
SAT Prep: The Hard Problems 10-12
Complete ACT Prep 10-12

Online C: Aug 10-Aug 21
9:00 AM - 12:00 PM

Math
Math for Middle School 6-8
Intro to Algebra 7-9
Intro to Geometry 7-9
Intro to Algebra II 9-11
Intro to Precalculus 10-12
Intro to Calculus 10-12

Test Prep
Academies of Loudoun Prep 7-8
TJ Admissions Prep 7-8
Advanced TJ Essay Writing 7-8
PSAT-NMSQT Prep 9-11
Complete SAT Prep 10-12
SAT Prep: The Hard Problems 10-12
Complete ACT Prep 10-12



ASHBURN AND CHANTILLY SCHEDULES



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

Session I: Jun 22-Jul 2

Morning

Writing Skills and Grammar 4-6
Filmmaking 4-6
Intro to Drones 4-6
Reading for Meaning 7-9
Aerospace Engineering 7-9
Competitive Robotics 7-9
Flight School 7-9
Python Programming 9-12
Complete SAT Prep 10-12

Afternoon

Public Speaking 4-6
Robotics Olympiad 4-6
Driving Sims 4-6
Neuroscience 7-9
Academies of Loudoun Prep 7-8
Digital Cinema 7-9
Drones 7-9
Personal Essays 9-12
Complete ACT Prep 10-12

Session II: Jul 6-Jul 17

Morning

Elementary Debate 4-6
Flight Sims 4-6
Gateway to Algebra 5-6
Writers' Workshop 7-9
Forensic Science 7-9
3D Game Dev 7-9
Arduino Lab 7-9
Artificial Intelligence 9-12
Complete SAT Prep 10-12

Afternoon

Creative Writing 4-6
Spy Science 4-6
Raspberry Pi Lab 4-6
Intro to Algebra 7-9
Model UN 7-9
TJ Admissions Prep 7-8
3D Animation 7-9
Cybersecurity Lab 9-12
PSAT/NMSQT Prep 9-11

Session III: Jul 20-Jul 31

Morning

Storytelling 4-6
Intro to Virtual Reality 4-6
Minecraft Modding 4-6
Math for Middle School 6-8
Medical Science 7-9
Robotics Combat 7-9
Spaceflight Sims 7-9
Academic Writing 9-12

Afternoon

Problem Solving 4-6
Minecraft and Python 4-6
Driving Sims 4-6
Analytic Writing 7-9
Mock Trial 7-9
Academies of Loudoun Prep 7-8
Virtual Reality 7-9
Intro to Calculus 10-12
Complete SAT Prep 10-12

Session IV: Aug 3-Aug 14

Morning

Hands-On Science 4-6
Mobile Robotics 4-6
Writing for Middle School 5-6
Intro to Algebra 7-9
Intro to Geometry 7-9
Academies of Loudoun Prep 7-8
Fighter Combat School 7-9
Python Programming 9-12
PSAT/NMSQT Prep 9-11

Afternoon

Virginia Math 4-6
Creative AI 4-6
Flight Sims 4-6
Writing for High School 7-9
Middle School Debate 7-9
Intro to Python 7-9
Animal Physiology 7-9
Intro to Algebra II 9-11
Complete SAT Prep 10-12



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

Session I: Jun 22-Jul 2

Morning

Virginia Math 4-6
Public Speaking 4-6
MicroBit Lab 4-6
Writing for High School 7-9
Aerospace Engineering 7-9
Digital Cinema 7-9
3D Printing 7-9
Artificial Intelligence 9-12
Complete SAT Prep 10-12

Afternoon

Writing Skills and Grammar 4-6
Buildings and Bridges 4-6
Intro to 3D Printing 4-6
Math for Middle School 6-8
Middle School Debate 7-9
3D Game Dev 7-9
Robotics Combat 7-9
Intro to Algebra II 9-11

Session II: Jul 6-Jul 17

Morning

Writing Fundamentals 4-5
Problem Solving 4-6
3D Modeling 4-6
Intro to Algebra 7-9
Model UN 7-9
Photography 7-9
Competitive Robotics 7-9
Cloud Computing Lab 9-12
Complete SAT Prep 10-12

Afternoon

Elementary Debate 4-6
Filmmaking 4-6
Mobile Robotics 4-6
Writers' Workshop 7-9
Medical Science 7-9
Biomedical Engineering 7-9
Arduino Lab 7-9
Personal Essays 9-12
SAT: The Hard Problems 10-12

Session III: Jul 20-Jul 31

Morning

Writing Skills and Grammar 4-6
Spy Science 4-6
Intro to Drones 4-6
Intro to Geometry 7-9
Middle School Debate 7-9
2D Game Dev 7-9
3D Printing 7-9
Academic Writing 9-12
Complete SAT Prep 10-12

Afternoon

Virginia Math 4-6
Roblox Studio 4-6
Intro to 3D Printing 4-6
Writing for High School 7-9
Forensic Science 7-9
TJ Admissions Prep 7-8
Drones 7-9
Intro to Algebra II 9-11
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 20-Jul 31

Morning

Reading for Fun 4-6
 Storytelling 4-6
 Minecraft and Python 4-6
 Chem Workshop 4-6
 Intro to Algebra 7-9
 TJ Admissions Prep 7-8
 2D Game Dev 7-9
 Digital Cinema 7-9

Afternoon

Problem Solving 4-6
 Filmmaking 4-6
 Robotics Olympiad 4-6
 MicroBit Lab 4-6
 Writing for High School 7-9
 Model UN 7-9
 Medical Science 7-9
 Intro to AI 7-9

Session IV: Aug 3-Aug 14

Morning

Hands-On Science 4-6
 Roblox Studio 4-6
 Mobile Robotics 4-6
 Gateway to Algebra 5-6
 Analytic Writing 7-9
 Mock Trial 7-9
 Intro to Python 7-9
 3D Game Dev 7-9

Afternoon

Writing Skills and Grammar 4-6
 Public Speaking 4-6
 Creative AI 4-6
 Minecraft Modding 4-6
 Intro to Geometry 7-9
 Advanced TJHSST Prep 7-8
 Photography 7-9
 Robotics Combat 7-9

Session V: Aug 17-Aug 21

Morning

Paragraphs 4-6
 Intro to GameMaker 4-6
 Intro to Filmmaking 4-6
 Pre-Algebra Bootcamp 6-8
 Geometry Bootcamp 7-9
 Intro to Improv 7-9
 Creative AI Week 7-9
 SAT Math Bootcamp 10-12

Afternoon

Virginia Math Bootcamp 4-6
 Persuasive Speaking 4-6
 Minecraft Redstone 4-6
 Short Essays 7-9
 Algebra Bootcamp 7-9
 Intro to Godot 7-9
 Algebra II Bootcamp 9-11
 SAT Verbal Bootcamp 10-12



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

Session I: Jun 22-Jul 2

Morning

Strategic Reading 4-6
 Elementary Debate 4-6
 Minecraft Modding 4-6
 Intro to Algebra 7-9
 Neuroscience 7-9
 Biomedical Engineering 7-9
 Virtual Reality 7-9
 Personal Essays 9-12
 Complete SAT Prep 10-12

Afternoon

Filmmaking 4-6
 Intro to Virtual Reality 4-6
 3D Modeling 4-6
 Analytic Writing 7-9
 Mock Trial 7-9
 TJ Admissions Prep 7-8
 Intro to AI 7-9
 Cloud Computing Lab 9-12
 SAT: The Hard Problems 10-12

Session II: Jul 6-Jul 17

Morning

Virginia Math 4-6
 Minecraft and Python 4-6
 Intro to 3D Printing 4-6
 Writing for High School 7-9
 Middle School Debate 7-9
 Robotics Combat 7-9
 Drones 7-9
 Python Programming 9-12
 PSAT/NMSQT Prep 9-11

Afternoon

Creative AI 4-6
 Intro to Drones 4-6
 Writing for Middle School 5-6
 Intro to Geometry 7-9
 2D Game Dev 7-9
 Digital Cinema 7-9
 3D Printing 7-9
 Complete SAT Prep 10-12

Session III: Jul 20-Jul 31

Morning

Buildings and Bridges 4-6
 Stop-Motion Animation 4-6
 Mobile Robotics 4-6
 Intro to Algebra 7-9
 Model UN 7-9
 Forensic Science 7-9
 Biomedical Engineering 7-9
 Cybersecurity Lab 9-12
 Complete SAT Prep 10-12

Afternoon

Elementary Debate 4-6
 3D Modeling 4-6
 Gateway to Algebra 5-6
 Reading for Meaning 7-9
 Aerospace Engineering 7-9
 Photography 7-9
 Competitive Robotics 7-9
 Artificial Intelligence 9-12
 Complete ACT Prep 10-12

Session IV: Aug 3-Aug 14

Morning

Creative Writing 4-6
 Virginia Math 4-6
 Robotics Engineering 4-6
 Writers' Workshop 7-9
 Animal Physiology 7-9
 TJ Admissions Prep 7-8
 3D Printing 7-9
 Intro to Precalculus 10-12

Afternoon

Writing Fundamentals 4-5
 Intro to Game Dev 4-6
 Intro to 3D Printing 4-6
 Math for Middle School 6-8
 Intro to Geometry 7-9
 Middle School Debate 7-9
 Arduino Lab 7-9
 Academic Writing 9-12
 Complete SAT Prep 10-12

Session V: Aug 17-Aug 21

Morning

Virginia Math Bootcamp 4-6
 Intro to GameMaker 4-6
 Minecraft Redstone 4-6
 Short Essays 7-9
 Algebra Bootcamp 7-9
 Intro to Improv 7-9
 Short Films 7-9
 Algebra II Bootcamp 9-11
 SAT Verbal Bootcamp 10-12

Afternoon

Paragraphs 4-6
 Virginia Math Bootcamp 4-6
 Persuasive Speaking 4-6
 Intro to Filmmaking 4-6
 Pre-Algebra Bootcamp 6-8
 Geometry Bootcamp 7-9
 Intro to Godot 7-9
 Creative AI Week 7-9
 SAT Math Bootcamp 10-12

TYSONS AND VIENNA SCHEDULES



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

Session I: Jun 22-Jul 2

Morning

Roblox Studio 4-6
Mobile Robotics 4-6
Creative AI 4-6
Writing for Middle School 5-6
Intro to Algebra 7-9
Middle School Debate 7-9
Intro to Python 7-9
Medical Science 7-9
PC Hardware Lab 7-9
Academic Writing 9-12
Cybersecurity Lab 9-12
PSAT/NMSQT Prep 9-11

Afternoon

Problem Solving 4-6
Elementary Debate 4-6
Chem Workshop 4-6
Flight Sims 4-6
Writers' Workshop 7-9
3D Animation 7-9
Robotics Combat 7-9
Hands-On AI Lab 7-9
Python Programming 9-12
Intro to Precalculus 10-12
Complete SAT Prep 10-12

Session II: Jul 6-Jul 17

Morning

Hands-On Science 4-6
Intro to Virtual Reality 4-6
Driving Sims 4-6
Gateway to Algebra 5-6
Reading for Meaning 7-9
Mock Trial 7-9
Digital Cinema 7-9
Hands-On AI Lab 7-9
Intro to Algebra II 9-11
Artificial Intelligence 9-12
Complete ACT Prep 10-12

Afternoon

Writing Skills and Grammar 4-6
Storytelling 4-6
Stop-Motion Animation 4-6
Minecraft Modding 4-6
Math for Middle School 6-8
Aerospace Engineering 7-9
Virtual Reality 7-9
PC Hardware Lab 7-9
Flight School 7-9
Intro to Calculus 10-12
Complete SAT Prep 10-12

Session III: Jul 20-Jul 31

Morning

Creative Writing 4-6
Public Speaking 4-6
Robotics Engineering 4-6
Flight Sims 4-6
Intro to Geometry 7-9
Intro to Python 7-9
Neuroscience 7-9
3D Game Dev 7-9
PC Hardware Lab 7-9
Personal Essays 9-12
SAT: The Hard Problems 10-12

Afternoon

Writing Fundamentals 4-5
Virginia Math 4-6
Intro to Game Dev 4-6
Raspberry Pi Lab 4-6
Analytic Writing 7-9
Middle School Debate 7-9
Animal Physiology 7-9
Fighter Combat School 7-9
Python Programming 9-12
Intro to Precalculus 10-12
Complete SAT Prep 10-12

Session IV: Aug 3-Aug 14

Morning

Elementary Debate 4-6
Minecraft and Python 4-6
Filmmaking 4-6
Writing for Middle School 5-6
Math for Middle School 6-8
Medical Science 7-9
2D Game Dev 7-9
Competitive Robotics 7-9
Spaceflight Sims 7-9
Intro to Algebra II 9-11
SAT: The Hard Problems 10-12

Afternoon

Problem Solving 4-6
Spy Science 4-6
Robotics Olympiad 4-6
Driving Sims 4-6
Writing for High School 7-9
Intro to Algebra 7-9
Model UN 7-9
Aerospace Engineering 7-9
Digital Cinema 7-9
PC Hardware Lab 7-9
Artificial Intelligence 9-12
Complete SAT Prep 10-12



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

Session I: Jun 22-Jul 2

Morning

Writing Fundamentals 4-5
Stop-Motion Animation 4-6
Raspberry Pi Lab 4-6
Gateway to Algebra 5-6
Reading for Meaning 7-9
Model UN 7-9
Forensic Science 7-9
Competitive Robotics 7-9

Afternoon

Creative Writing 4-6
Minecraft and Python 4-6
Spy Science 4-6
Robotics Engineering 4-6
Intro to Geometry 7-9
Animal Physiology 7-9
Photography 7-9
2D Game Dev 7-9

Session II: Jul 6-Jul 17

Morning

Reading for Fun 4-6
Chem Workshop 4-6
Intro to Game Dev 4-6
Robotics Olympiad 4-6
Intro to Geometry 7-9
Middle School Debate 7-9
TJ Admissions Prep 7-8
Intro to AI 7-9

Afternoon

Virginia Math 4-6
Public Speaking 4-6
Buildings and Bridges 4-6
MicroBit Lab 4-6
Analytic Writing 7-9
Intro to Algebra 7-9
Intro to Python 7-9
Neuroscience 7-9

Session III: Jul 20-Jul 31

Morning

Elementary Debate 4-6
Filmmaking 4-6
Mobile Robotics 4-6
Creative AI 4-6
Math for Middle School 6-8
Writers' Workshop 7-9
Advanced TJHSST Prep 7-8
Aerospace Engineering 7-9

Afternoon

Hands-On Science 4-6
Minecraft Modding 4-6
Writing for Middle School 5-6
Gateway to Algebra 5-6
Mock Trial 7-9
Digital Cinema 7-9
Robotics Combat 7-9
Arduino Lab 7-9



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Edlin School
10742 Sunset Hills Rd.
- Tysons**
BASIS Independent McLean
8000 Jones Branch Dr.
- Vienna**
Green Hedges School
415 Windover Ave. NW
- Chantilly**
St. Timothy Catholic School
13809 Poplar Tree Rd.
- McLean**
Lutheran Church of the Redeemer
1545 Chain Bridge Rd.



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