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Academies of Loudoun Fall Information

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Fall SY 2026-2027

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Academies of Loudoun

BUILDING INTENTIONAL COLLISIONS

Video Overview

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First Day of School



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ACADEMIES OF LOUDOUN
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Academies of Loudoun

A STEM center for innovation, exploration, research, and collaboration



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AGENDA

- Learn about the Academies of Loudoun Programs
- Review Admission Criteria
- Questions and Answers

"What you know is far less important than what you can do with what you know."

-Tony Wagner



MISSION

The mission of the Academies of Loudoun is to empower students to **explore, research, collaborate, innovate,** and to make meaningful contributions to the world in the fields of **science, technology, engineering, and mathematics**.

- Academy of Engineering & Technology **(AET)**
- Academy of Science **(AOS)**
- Monroe Advanced Technical Academy **(MATA)**

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APPLICANTS

Who can apply to the Academies of Loudoun?

- Public, Private and Homeschooled students who **reside** in Loudoun County Virginia*
- Currently enrolled in Grade 8 (Fall Admissions)
- Must be enrolled in Algebra 1 or higher

*All applicants offered admission must be enrolled as full-time students in LCPS (Will attend their zoned high school and the Academies of Loudoun on alternating days for the duration of their program).

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WHEN TO APPLY



AET Program

- Apply in the fall of Grade 8
- 3 pathways

AOS Program

- Apply in the fall of Grade 8
- 1 pathway

Advanced AET Program

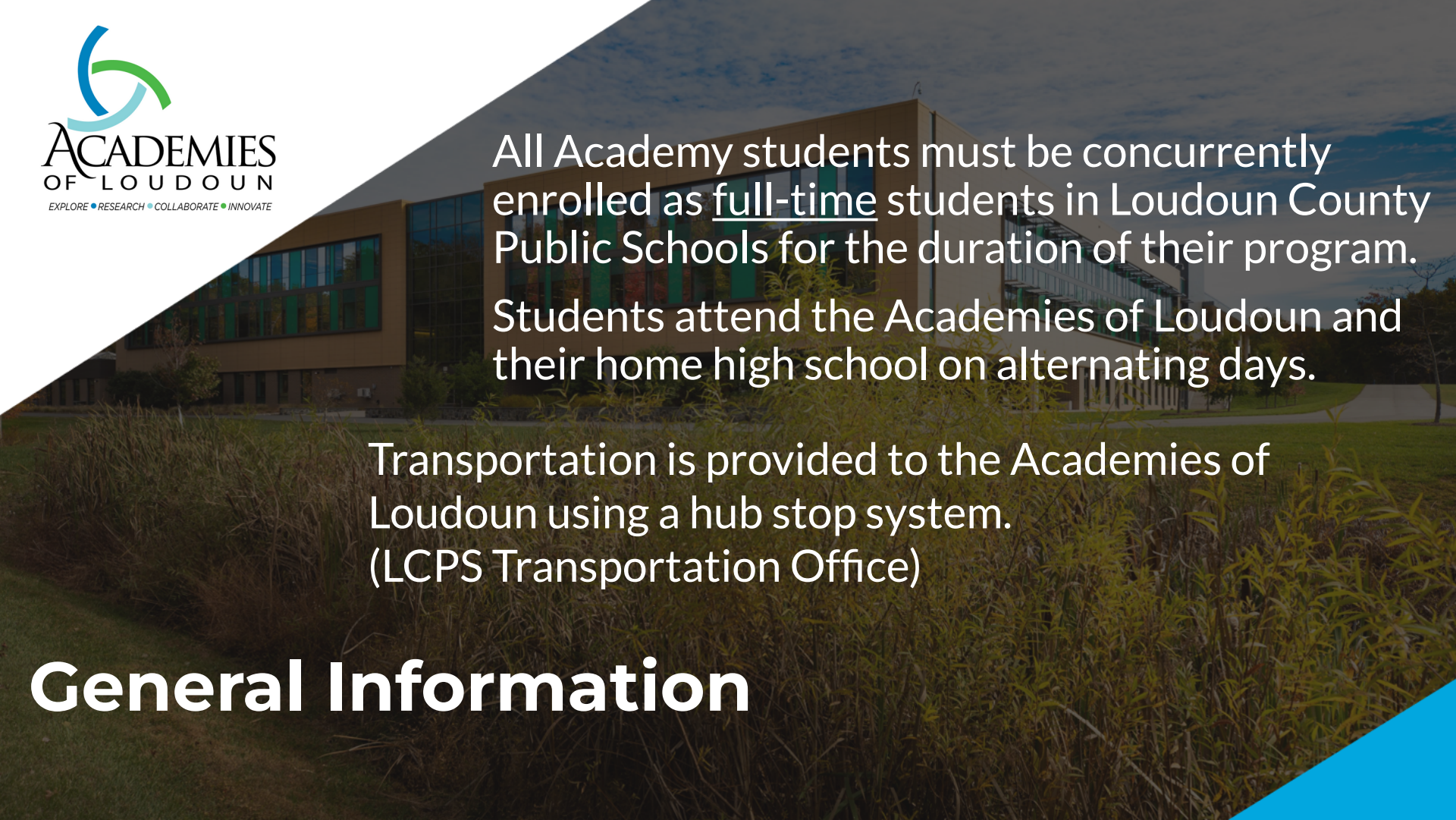
- Apply in the winter of Grade 10
- 2 pathways

MATA Program

- Apply in the winter of Grade 10 or Grade 11
- 25 pathways

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All Academy students must be concurrently enrolled as full-time students in Loudoun County Public Schools for the duration of their program.

Students attend the Academies of Loudoun and their home high school on alternating days.

Transportation is provided to the Academies of Loudoun using a hub stop system.
(LCPS Transportation Office)

General Information

SAMPLE ACL & HOME HS SCHEDULING

[AET Engineering]

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LCPS

AET Engineering Pathway

AET Courses-9th Grade B Day	Home HS Courses A Day
MATH: AET Integrated Mathematics I	English Social Science Health & PE World Language
SCI: AET Physics	
CTE: AET Engineering Studies I	
AET Courses-10th Grade	**Home HS Courses**
MATH: AET AP Integrated Mathematics II	English Social Science Health & PE World Language
SCI: AET Research Chemistry	
CTE: AET Engineering Studies II	
2 math credits, 2 science credits, 2 CTE credits	2 English, 2 social science, 2 Health and PE, 2 World Language (example)

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AET is a 4-
year progr

Academy of Engineering & Technology (AET)

Students apply in Grade 8

The Academy of Engineering & Technology (AET) curriculum strives to provide advanced academic STEM (Science, Technology, Engineering and Mathematics) pathways for students to engage in the study of:

- **Engineering**
- **Entrepreneurship**
- **Information Technology**

All AET courses are honors level or above. Courses are "weighted" by adding 0.5 to the point value for the grade. AET AP, Dual Enrollment and Multivariable Calculus courses are weighted at 1.0

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AET PATHWAYS

AET Engineering

An intensive study of engineering and the engineering design process.

Required: Multiple engineering research projects while enrolled in AET courses.

AET Entrepreneurship

STEM fields and an intensive study of developing, marketing and managing STEM related businesses.

Required: Multiple STEM focused business and marketing plans.

AET Information Technology (IT)

An intensive study of computer science and information technologies.

Required: Design, develop and conduct multiple research projects while enrolled in AET courses.

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AET ENGINEERING 4-YEAR PROGRAM

* AET Course Descriptions

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AET Engineering Pathway – 4 year

9th	10th	11th	12th
AET Integrated Math I	AET AP Integrated Math II (verified math credit)	AET AP Calculus AB **OR** BC	AET AP Statistics **OR** AP Calculus BC **OR** Multivariable Calculus
AET Physics	AET Research Chemistry (verified science credit)	AET AP Science Options (Biology, Chemistry, Environmental Science, **OR** Physics - Mechanics)	AET AP Science Options (Biology, Chemistry, Environmental Science, **OR** Physics - Mechanics)
AET Engineering I (CTE credit)	AET Engineering II (CTE credit)	AET Engineering III – Junior Research (science elective credit)	AET Engineering Senior Research* (science elective credit)

*AET Engineering Senior Research topics may include chemical, civil, electrical, mechanical, robotics, aerospace, or applied engineering research

**All AET courses are honors level courses and are "weighted" by adding 0.5 to the point value for the grade. AET AP and Multivariable Calculus courses are weighted at 1.0

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AET INFORMATION TECHNOLOGY 4-YEAR PROGRAM

*** AET Course Descriptions

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AET Information Technology – 4 year

9th	10th	11th	12th
AET Integrated Math I	AET AP Integrated Math II (verified math credit)	AET AP Calculus AB **OR** BC	AET AP Statistics **OR** AP Calculus BC **OR** Multivariable Calculus
AET Physics	AET Research Chemistry (verified science credit)	AET AP Science Options (Biology, Chemistry, Environmental Science, **OR** Physics - Mechanics)	AET AP Science Options (Biology, Chemistry, Environmental Science, **OR** Physics - Mechanics)
AET Applied Advanced Computer Science I (computer science credit)	AET AP Applied Advanced Computer Science II (science credit)	AET Computer Science – Junior Research (science elective credit)	AET CS Senior Research* (science elective credit)

*AET Senior Research topics may include software, computer systems, internet of things, virtual reality, or mobile/web application development research

**All AET courses are honors level courses and are "weighted" by adding 0.5 to the point value for the grade. AET AP and Multivariable Calculus courses are weighted at 1.0

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AET ENTREPRENEURSHIP 4-YEAR PROGRAM

*** AET Course Descriptions

AET Entrepreneurship + Engineering - 4 year

9th	10th	11th	12th
AET Integrated Math I	AET AP Integrated Math II (verified math credit)	AET AP Calculus AB **OR** BC	AET AP Statistics **OR** AP Calculus BC **OR** Multivariable Calculus
AET Physics	AET Research Chemistry (verified science credit)	AET AP Science Options (Biology, Chemistry, Environmental Science, **OR** Physics - Mechanics)	AET AP Science Options (Biology, Chemistry, Environmental Science, **OR** Physics - Mechanics)
AET Entrepreneurship I DE (CTE credit)	AET Entrepreneurship II DE (CTE credit)	AET Engineering I (CTE credit)	AET Engineering II (CTE credit)

AET Entrepreneurship + IT - 4 year

9th	10th	11th	12th
AET Integrated Math I	AET AP Integrated Math II (verified math credit)	AET AP Calculus AB **OR** BC	AET AP Statistics **OR** AP Calculus BC **OR** Multivariable Calculus
AET Physics	AET Research Chemistry (verified science credit)	AET AP Science Options (Biology, Chemistry, Environmental Science, **OR** Physics - Mechanics)	AET AP Science Options (Biology, Chemistry, Environmental Science, **OR** Physics - Mechanics)
AET Entrepreneurship I DE (CTE credit)	AET Entrepreneurship II DE (CTE credit)	AET Applied Advanced Computer Science I (computer science credit)	AET AP Applied Advanced Computer Science II (science credit)

**All AET courses are honors level courses and are “weighted” by adding 0.5 to the point value for the grade. AET AP and Multivariable Calculus courses are weighted at 1.0

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AOS

AOS is a 4-year program

ACADEMY OF SCIENCE

- The Academy of Science (AOS) curriculum strives to provide students the opportunity to deeply engage in mathematics, science, and research and to promote creativity and innovation through problem solving and collaboration.
- All AOS courses are honors level courses and are “weighted” by adding 0.5 to the point value for the grade. AOS AP and Multivariable Calculus courses are weighted at 1.0

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AOS 4 YEAR PROGRAM

AOS Course Descriptions

GRADE 9	GRADE 10	GRADE 11	GRADE 12
AOS Integrated Science I & II (Earth Science, Chemistry, Physics) **200 min period**	**AOS Integrated Science III** **100 min period**	**AOS AP Biology** **100 min period**	**AOS AP Sciences** (Chemistry, Physics, Environmental Science) **100 min period**
	AOS Sophomore Science Research **100 min period**	**AOS Junior Science Research** **100 min period**	**AOS Senior Science Research** **100 min period**
AOS Integrated Math I (verified math credit) **100 min period**	**AOS AP Integrated Math II** **100 min period**	**AOS AP Calculus AB or AOS AP Calculus BC** **100 min period**	**AOS AP Calculus BC or AOS Multivariable Calculus** **100 min period**

**All AOS courses are honors level courses and are "weighted" by adding 0.5 to the point value for the grade. AOS AP and Multivariable Calculus courses are weighted at 1.0

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HICH PROGRAM IS GHT FOR ME?

AET:

- Emphasis in the Physical Sciences
- Advanced Academic, rigorous paced Mathematics
- Opportunity to engage in research in a specialized pathway

AOS:

- Emphasis in Biological Sciences
- Advanced Academic, rigorous paced Mathematics
- Opportunity to engage in research (usually in one of the core sciences)

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ADMISSIONS CRITERIA

All applicants:

- Enrolled in Algebra I or above at the time of application
- Writing Assessment Score
- ACL STEM Thinking Skills Assessment Scores
- A final grade of C or higher is required in all grade 6 - 7 math and science courses, Grade 8 Math (Semester I), and Grade 8 Science (Quarter 2)*

*Students who did not attend LCPS in 6th and 7th grade must check with their schools to confirm that previous grades have been uploaded to our student information system.

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Academies of Loudoun Admissions Timeline SY26-27



- **August 24, 2026** – Fall admissions window opens
- **October 15, 2026** - Fall admissions window closes at 12:00 p.m. (noon)
- **November 12, 2026** - Writing and ACL STEM Thinking Skills Assessments. Tests will be administered at every middle school during the school day, and at the Academies of Loudoun for private and homeschooled students
- **February-March 2027** – Admission offers will be posted in Student Opportunities
- **February-August 2027** - Students must accept or decline all admissions offers. Waitlisted applicants will be notified as seats become available between March 2027 and the last day of summer

Monroe Advanced Technical Academy (MATA) Program



The Monroe Advanced Technical Academy (MATA) program strives to provide significant and relevant learning in Career & Technical Education (CTE) which allows students to explore and innovate while preparing for 21st century college and careers.

MATA offers 26 pathways

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MATA Pathways

1-Year Pathways

Auto Collision Repair DE
Biotechnology
Building Construction
Certified Nurse Aide DE
CISCO DE
Computer and Digital Animation
Culinary Arts
Cyber Security DE
Emergency Medical Technician DE
Environmental Plant Science DE
Health Informatics DE
HVAC
Masonry
Respiratory Therapy
TV Production and Digital Moviemaking
Veterinary Sciences DE

2-Year Pathways

Advanced Computer and Cybersecurity DE
Auto Service Technology
Biomedical Technology DE
Cosmetology
Game Design DE
Graphic Communications
Mechatronics DE
Pharmacy Technology DE
Radiology Technology DE
Welding DE

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***Additional requirements for Dual Enrollment (DE) and some Health Science Pathways. Refer to program of studies for specifics on DE credits.**

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Private/Homeschool Applicants

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Fall Application

- Private and homeschool applicants
- Instructions are on the Fall Admissions page
- It is imperative to contact the admissions office once you have completed your registration appointment at your zoned middle school

Home/private school students offered admissions to the Academies of Loudoun must be enrolled concurrently as full- time LCPS students in order to attend the Academies of Loudoun.

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Private & Homeschool Applicants

After submitting your online application, please send the following items in **one (1) packet** to the address below.

- Official student Grade 6 & 7 transcript/report cards from school registrar in **sealed** envelope
- No other documents or information will be accepted

Office of Admissions & Outreach
42075 Loudoun Academy Drive
Leesburg, VA 20175

Deadline: October 15, 2026

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Parent/Guardian Permission



New this year - An application is considered complete only after the student has submitted it and a parent or guardian has approved it by **October 15, 2026 at 12:00 PM.**

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Contact

AcademiesAdmissions@lcps.org

Phone: (571) 252-1992

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