

2025 STEM Courses & Camps

TENTATIVE ONLINE & IN-PERSONSCHEDULE

FOR HIGH SCHOOL, MIDDLE SCHOOL & ELEMENTARY SCHOOL STUDENTS

Office Hours until June 15th

South Riding Center:

Monday through Friday from 6:30 pm to 8:30 pm,
Saturday from 1 pm – 3 pm
Sunday from 10 am – 1 pm
Eastern Standard Time

Herndon Center:

Monday & Wednesday from 6:30 – 8:30pm,
Saturday 10:30 am to 12:00 pm
Eastern Standard Time

Ashburn Center:

Monday through Thursday from 6:30 pm to 8:30 pm
Eastern Standard Time

CONTACT US:



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Dr. Rao: (703) 582-0436

Website: www.curielearning.com

Email: curielearning@gmail.com

Main Office: 43250 Stonewall Pond St., South Riding, VA 20152

<u>Herndon Center</u>	<u>South Riding/Chantilly Center</u>	<u>Ashburn Center</u>
13505 Dulles Technology Dr., Suite 1, Herndon, VA 20171	43250 Stonewall Pond St., South Riding, VA 20152	20604 Gordon Park Square #150 Ashburn, VA 20147

PAYMENT OPTIONS:

All registration forms must be completed online before a payment is made.

Online Payment Option: For all short-term summer courses, all enrollees will receive an email invoice to make a payment online through PayPal with a 4% online processing fee or through Zelle to avoid any online payment service fee.

Drop Box (South Riding Center): There is a drop box on the porch of the South Riding Center.
You may drop off your check into a box any time. Please place your check in an envelope. On the MEMO line on the check, please include your child's first and last name and the class for which your child is registered.

Mailing Option: You may also mail your check to the South Riding Center via USPS (43250 Stonewall Pond St., South Riding, VA 20152).

REGISTRATIONS ARE NOT COMPLETED UNTIL THE FULL PAYMENT HAS BEEN RECEIVED AND PROCESSED.

Computer Courses:

1. Intro to JAVA Course	(\$)	Page 20
2. TJ Freshman/High School Java	(\$695)	Page 21
3. AP Computer Science	(\$795)	Page 21

Day Time Technology Summer Camp for Rising Grade 2 - 12:

1. Robotics SPRING Boot Camp	(\$90)	Page 5
2. Creative Writing Boot Camp	(\$450)	Page 22
3. Intro to Cyber Security	(\$)	Page 22
4. Intro to Python Programming Camp	(\$)	Page 23
5. Intro to Python Programming Camp	(\$)	Page 23
6. Robotics & Arduinos Camp	(\$)	Page 24
7. Intro to Quantum Physics Camp	(\$)	Page 25
8. Introduction to AI & Machine Learning	(\$)	Page 25

COURSES/CAMPS ACCORDING TO AGE GROUP

COURSES FOR ELEMENTARY SCHOOL STUDENTS (RISING GRADES 2-5)

<p><u>RISING 2ND GRADE:</u> Summer Bridge Math Program: Page 13</p>	<p><u>RISING 3RD GRADE:</u> Robotics & Arduinos STEM Camp: Page 24</p>
<p><u>RISING 4TH GRADE:</u> Robotics & Arduinos STEM Camp: Page 24</p>	<p><u>RISING 5TH GRADE:</u> Robotics & Arduinos STEM Camp: Page 24</p>

COURSES FOR MIDDLE SCHOOL STUDENTS (RISING GRADES 6-9)

<p><u>RISING 6TH GRADE:</u> Intro to JAVA STEM Camp: Page 21 Robotics & Arduinos STEM Camp: Page 24 Intro to Python Programming STEM Camp: Page 21 Intro to Quantum Physics STEM Camp: Page 25 Creative Writing Bootcamp: Page 22</p>	<p><u>RISING 7TH GRADE:</u> Intro to JAVA STEM Camp: Page 20 Intro to Cyber Security Camp: Page 22 Intro to AI & Machine Learning: Page 23 Robotics & Arduinos STEM Camp: Page 24 Intro to Python Programming STEM Camp: Page 23 Intro to Quantum Physics STEM Camp: Page 25 Creative Writing Bootcamp: Page 22</p>
<p><u>RISING 8TH GRADE:</u> Intro to JAVA STEM Camp: Page 20 Intro to Cyber Security Camp: Page 22 Intro to AI & Machine Learning: Page 23 Robotics & Arduinos STEM Camp: Page 24 Intro to Python Programming STEM Camp: Page 23 Intro to Quantum Physics STEM Camp: Page 25 Creative Writing Bootcamp: Page 22</p>	<p><u>RISING 9TH GRADE:</u> Intro to JAVA STEM Camp: Page 20 Intro to Cyber Security Camp: Page 22 Intro to AI & Machine Learning: Page 23 Robotics & Arduinos STEM Camp: Page 24 Intro to Python Programming STEM Camp: Page 23 Product Design STEM Camp: Page 24 Creative Writing Bootcamp: Page 22 Intro to Quantum Physics STEM Camp: Page 25</p>

COURSES FOR HIGH SCHOOL STUDENTS (RISING GRADES 9-12)

<p><u>HS COMPUTER COURSES</u> Intro to JAVA: Page 20 High School JAVA: Page 21 AP Computer Science: Page 21</p>	
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STEM COURSES & CAMPS

Creative Writing Boot Camp

Rising 6th to 10th Graders

Ms. Kylie Smith & Ms. Amber Beach

The Creative Writing Boot Camp is an in-person, one-week camp course designed for students in rising grades 6-10. Students will explore the basics of creative writing and will write personal narratives, short stories, poetry, and even the outline and first chapter of a novel. Students will experience lessons, writing activities, and writing projects with one-on-one feedback from a teacher. Along with being an enjoyable form of communication and expression, creative writing is extremely valuable for academics and career, whether that's for writing college application and scholarship essays, creating marketing materials, or a variety of other applications. This camp is developed and taught by Mrs. Erin Price, the English Program Director and a published writer, assisted by Ms. Ziz Kilmer, a creative writer and English student.

IMPORTANT: While lessons will be incorporated, a significant portion of the camp will be dedicated to peer editing. Students must be comfortable sharing their writing with the teachers and their peers and receiving feedback. Students must come prepared each day with their assigned writing projects.

**Materials: Please bring a laptop, a notebook, a folder, and at least 5 pencils to class each day.*

\$450

IN-PERSON at South Riding center

Monday – Friday from 9am – 2pm

Dates: July 7th – July 11th



[CLICK HERE FOR THE CREATIVE WRITING BOOT CAMP ENROLLMENT FORM](#)



Intro to Cyber Security Camp

Rising 7th to 10th Graders

Introduction to Cybersecurity is an **online and in-person, week-long camp** designed to introduce rising 7th–9th graders to the world of cybersecurity and digital safety. This camp covers fundamental cybersecurity concepts, including password security, online safety, cyber threats, encryption, and ethical hacking. The course is project-based, with a strong emphasis on real-world applications, allowing students to engage in hands-on activities, simulations, and interactive challenges. By the end of the week, students will have gained a deeper understanding of cybersecurity principles and learned practical skills to protect themselves and others online.

[CLICK HERE FOR THE CAMP CURRICULUM](#)

\$295

ONLINE (HYBRID) / IN-PERSON

IN-PERSON at South Riding center

*Monday – Friday from 9am – 12pm**

Dates: June 23th – June 27th



[CLICK HERE FOR THE INTRO TO CYBER SECURITY CAMP ENROLLMENT FORM](#)



Introduction to Python Programming Camp

5-Day Camp for Rising 7th – Rising 10th Grade Students

Ronit Manchanda

Introduction to Python Programming is an **online and in-person, week-long camp** that introduces rising 7th–9th graders to the fundamentals of computer science and programming using Python. This hands-on, **project-based** camp covers essential programming concepts, including variables, loops, functions, conditionals, and user input, while emphasizing real-world applications. By the end of the camp, students will have built multiple interactive projects and gained a strong foundation in Python programming.

[CLICK HERE FOR THE CAMP ITINERARY!](#)

\$295

ONLINE (HYBRID) / IN-PERSON

IN-PERSON at South Riding center

*Monday – Friday from 9am – 12pm**

Dates: July 28th – August 1st



[CLICK HERE FOR THE INTRO TO PYTHON CAMP ENROLLMENT FORM](#)



Introduction to Python Programming Course

Rising 7th – Rising 10th Grade Students

Ronit Manchanda

Introduction to Python is an online and in-person, six-week-long course designed to provide rising 7th–9th graders with a structured introduction to computer science and programming using Python. The course is project-based and focuses on real-world applications, allowing students to practice coding through interactive assignments and guided projects. By the end of the course, students will have developed a solid understanding of Python fundamentals and completed multiple coding projects.

[CLICK HERE FOR THE CAMP ITINERARY!](#)

\$295

ONLINE (HYBRID) / IN-PERSON

IN-PERSON at South Riding center

Sundays from 3 pm – 5 pm

This class will meet once per week for 2 hour sessions.

[Sunday, 6/1 – Sunday, 7/13]

Classes will not be in session through the Fourth of July weekend (7/4-7/7)



[CLICK HERE FOR THE INTRO TO PYTHON CAMP ENROLLMENT FORM](#)



Robotics & Arduinos Camp

Rising 2nd to 8th Graders

First for Youth Team

(An organization created to give students STEM opportunities while starting, mentoring and funding Robotics teams in Northern Virginia)

Rising 2nd to Rising 5th Graders

During this in-person, **one-week camp**, students will acquire teamwork and problem-solving skills to construct Lego energy models under the guidance of our trained robotics instructors. Our instructors will provide a comprehensive overview of assembling energy models to show the different energy components such as source, storage, distribution, and consumption. Students will then learn to program the models to operate at the same time, demonstrating the flow of energy from the source to their communities. In addition, the students will participate in numerous projects, enabling them to learn about energy transfer and develop their skills of teamwork, problem solving, and block programming.

[CLICK HERE FOR THE CAMP ITINERARY](#)

\$325

IN-PERSON at South Riding center

*Monday – Friday from 9am – 2pm**

Two Choices:

June 23rd to June 27th

July 28th to August 1st

Rising 6th to Rising 9th Graders

During this in-person, **one-week camp**, students will use hands-on robotics kits along with our experienced robotics instructors to learn the intricacies of Arduinos and robotics. Our team of instructors will be walking students through the basics of assembling the robotics kit to programming it to follow a line, detect walls, and many other projects throughout the week. Students will learn the basics of C++ and Arduino programming, and will gain experience with assembling and testing a robot kit.

*Robotics kit is included value of \$80.00.

[CLICK HERE FOR THE CAMP ITINERARY](#)

\$425

IN-PERSON at South Riding center

*Monday – Friday from 9am – 2pm**

Two Choices:

July 14th to July 18th

July 21st to July 25th



[CLICK HERE FOR THE ROBOTICS CAMP ENROLLMENT FORM](#)



Intro to Quantum Physics Camp

Rising 7th to 9th Graders

This camp will introduce quantum science concepts at a basic level. Any level of skill is welcome and beginners are encouraged! We will be learning about topics like superposition and entanglement, as well as the quantum physics applications such as quantum computing, quantum material science, and even quantum policy. The curriculum is lecture-based, but there are ample hands-on and engaging experiments and activities every day. You will also get to take home some of the equipment. In this 4-day mini course, the aim is to provide a general overview of quantum science for students to dip their toes into. Hope you'll come to learn something new and interesting this season!

[CLICK HERE FOR THE CAMP CURRICULUM](#)

\$325

IN-PERSON at South Riding center

TBA

Dates: TBA (It will be occurred in August)



Limited
SEATS



[CLICK HERE FOR THE INTRO TO QUANTUM PHYSICS CAMP ENROLLMENT FORM](#)



Introduction to AI & Machine Learning Course

7th Graders & Up

This course is run by an organization created by high school students for younger students! This course provides a tailored introduction to artificial intelligence and machine learning, two of the fastest growing and cutting-edge areas of research in the world today. Students will learn the fundamentals of programming for data science and AI development. They will apply their skills in developing a specialized AI project that they can include in their résumés. Finally, they will dive into machine learning concepts and develop an outline for a research project; top projects will be invited to a research symposium to present their idea to an audience for prizes!

[CLICK HERE FOR THE COURSE CURRICULUM](#)

TBA

ONLINE

Coming Soon



Limited
SEATS



[CLICK HERE FOR THE Introduction to AI & Machine Learning Course ENROLLMENT FORM](#)



COMPUTER COURSES

Intro to JAVA Course

Rising 7th Grade and Up

Ronit Manchanda

Introduction to Java is an **online, six-week-long** course designed to provide rising 7th–9th graders with a structured introduction to computer science and programming using Java. The course is project-based and focuses on real-world applications, allowing students to practice coding through interactive assignments and guided projects. By the end of the course, students will have developed a solid understanding of Java fundamentals and completed multiple coding projects.

[CLICK HERE FOR THE COURSE CURRICULUM](#)

\$395

TBA

This class will meet once per week for 2 hour sessions.

TBA



[CLICK HERE FOR THE INTRO TO JAVA ENROLLMENT FORM](#)



High School JAVA

(TJ Freshman JAVA)

Mr. Aaron Guidry

Mr. Guidry has more than 10 years experience teaching computer science to high school students.

In this **seven-week** course students will learn to program using JAVA, a widely used general purpose programming language. This course is designed to prepare students to excel in freshman Computer Science course at TJ and Computer Science course at other high schools for rising 9th, 10th, 11th or 12th grade students. Students will have hands-on experience with coding. Classes meet twice a week.

Topics include:

Hardware and Computing Basics, Binary and Base Systems, Basic Data Encoding, Primitive Data Types, Operators, Program Flow Control and Conditional Statements, Iteration, String Class, Array Data Structure, Methods, Writing Classes, Graphics and Graphical User Interfaces, Object Oriented Programming (OOP) and Inheritance taught through Game Design, Recursion (Light Introduction), Searching and Sorting Algorithms (Basic Concepts), Reading and Writing Files (If time allows).

\$695

ONLINE ONLY

Mondays and Wednesdays from 4 pm – 6 pm

This class will meet twice per week for 2 hour sessions.

[Monday, 6/16 – Wednesday, 7/30]



[CLICK HERE FOR THE INRO TO HIGH SCHOOL JAVA ENROLLMENT FORM](#)



AP Computer Science

Mr. Aaron Guidry

Mr. Guidry has more than 10 years experience teaching computer science to high school students.

This **seven-week** course is intended to prepare students for taking the AP Computer Science A course in the coming academic year. Preparing for the AP course is a great idea not only for getting a high grade in the course, but also for scoring well in the AP Exam at the end of the academic year. Many colleges require an AP Exam score of 4 or 5 to transfer the course for college credit. Subject SAT (SAT II) exams have been removed by the College Board, and colleges from now on will be looking at AP subject scores in the admission process.

Topics include:

Primitive Types, Using Objects, Boolean Expressions and if Statements, Iteration, Writing Classes, Array, ArrayList, 2D Array, Inheritance, Recursion
*We also focus on AP Exam taking strategies and a full-length practice exam will be conducted at the end of the course.

\$795

ONLINE ONLY

Tuesdays and Thursdays from 4 pm – 6 pm

This class will meet twice per week for 2 hour sessions.

[Tuesday, 6/17 – Thursday, 7/31]



[CLICK HERE FOR THE AP COMPUTER SCIENCE ENROLLMENT FORM](#)



<p><u>Herndon Center:</u> 13505 Dulles Technology Dr., Suite 1, Herndon, VA 20171</p>	<p><u>South Riding Center:</u> 43250 Stonewall Pond St., South Riding, VA 20152</p>	<p><u>Ashburn Center:</u> 20604 Gordon Park Square #150 Ashburn, VA 20147</p>
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