

# **2025 STEM Courses & Camps**

## **TENTATIVE ONLINE & IN-PERSONSCHEDULE**

**FOR HIGH SCHOOL, MIDDLE SCHOOL & ELEMENTARY SCHOOL STUDENTS**

### **Office Hours until June 15<sup>th</sup>**

#### **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:**



**Office phone number:** (703) 798-6808

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**Website:** [www.curielearning.com](http://www.curielearning.com)

**Email:** [curielearning@gmail.com](mailto:curielearning@gmail.com)

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

<b><u>Herndon Center</u></b>	<b><u>South Riding/Chantilly Center</u></b>	<b><u>Ashburn Center</u></b>
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	(\$395)	Page 8
2. TJ Freshman/High School Java	(\$695)	Page 8
3. AP Computer Science	(\$795)	Page 9

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

1. Creative Writing Boot Camp	(\$450)	Page 4
2. Intro to Cyber Security	(\$295)	Page 4
3. Intro to Python Programming Camp	(\$295)	Page 5
4. Intro to Python Programming Course	(\$295)	Page 5
5. Robotics & Arduinos Camp	(\$325/\$425)	Page 6
6. Robotics Boot Camp	(\$295)	Page 7
7. Intro to Quantum Physics Camp	(\$325)	Page 7
8. Intro to STEM Research Camp	(\$325)	Page 7

## **COURSES/CAMPS ACCORDING TO AGE GROUP**

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

<u><b>RISING 2<sup>ND</sup> GRADE:</b></u> Robotics & Arduinos STEM Camp <b>Page 6</b>	<u><b>RISING 3<sup>RD</sup> GRADE:</b></u> Robotics & Arduinos STEM Camp: <b>Page 6</b>
<u><b>RISING 4<sup>TH</sup> GRADE:</b></u> Robotics & Arduinos STEM Camp: <b>Page 6</b>	<u><b>RISING 5<sup>TH</sup> GRADE:</b></u> Robotics & Arduinos STEM Camp: <b>Page 6</b>

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

<u><b>RISING 6<sup>TH</sup> GRADE:</b></u> Intro to JAVA Course: <b>Page 8</b> Robotics & Arduinos STEM Camp: <b>Page 6</b> Creative Writing Bootcamp: <b>Page 4</b>	<u><b>RISING 7<sup>TH</sup> GRADE:</b></u> Intro to JAVA Course: <b>Page 8</b> Intro to Cyber Security Camp: <b>Page 4</b> Intro to STEM Research Camp: <b>Page 7</b> Robotics & Arduinos STEM Camp: <b>Page 6</b> Intro to Python Programming STEM Camp: <b>Page 5</b> Intro to Python Programming STEM Course: <b>Page 5</b> Intro to Quantum Physics STEM Camp: <b>Page 7</b> Creative Writing Bootcamp: <b>Page 4</b>
<u><b>RISING 8<sup>TH</sup> GRADE:</b></u> Intro to JAVA Course: <b>Page 8</b> Intro to Cyber Security Camp: <b>Page 4</b> Intro to STEM Research Camp: <b>Page 7</b> Robotics & Arduinos STEM Camp: <b>Page 6</b> Intro to Python Programming STEM Camp: <b>Page 5</b> Intro to Python Programming STEM Course: <b>Page 5</b> Intro to Quantum Physics STEM Camp: <b>Page 7</b> Creative Writing Bootcamp: <b>Page 4</b>	<u><b>RISING 9<sup>TH</sup> GRADE:</b></u> Intro to JAVA Course: <b>Page 8</b> Intro to Cyber Security Camp: <b>Page 4</b> Intro to STEM Research Camp: <b>Page 7</b> Robotics & Arduinos STEM Camp: <b>Page 6</b> Intro to Python Programming STEM Camp: <b>Page 5</b> Intro to Python Programming STEM Course: <b>Page 5</b> Intro to Quantum Physics STEM Camp: <b>Page 7</b> Creative Writing Bootcamp: <b>Page 4</b>
<u><b>RISING 10<sup>TH</sup> GRADE:</b></u> Intro to JAVA Course: <b>Page 8</b> Intro to Cyber Security Camp: <b>Page 4</b> Intro to STEM Research: <b>Page 7</b> Intro to Python Programming STEM Camp: <b>Page 5</b> Intro to Python Programming STEM Course: <b>Page 5</b> Creative Writing Bootcamp: <b>Page 4</b>	

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

<u><b>HS COMPUTER COURSES</b></u> Intro to JAVA Course: <b>Page 8</b> High School JAVA: <b>Page 8</b> AP Computer Science: <b>Page 9</b>	
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# STEM COURSES & CAMPS

## Creative Writing Boot Camp

Rising 6<sup>th</sup> to 10<sup>th</sup> 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 7<sup>th</sup> – July 11<sup>th</sup>**



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



## Intro to Cyber Security Camp

Rising 7<sup>th</sup> to 10<sup>th</sup> 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 23<sup>th</sup> – June 27<sup>th</sup>**



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



## Introduction to Python Programming Camp

5-Day Camp for Rising 7<sup>th</sup> – Rising 10<sup>th</sup> 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 28<sup>th</sup> – August 1<sup>st</sup>**



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



## Introduction to Python Programming Course

Rising 7<sup>th</sup> – Rising 10<sup>th</sup> 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*

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

**[Sunday, 6/1 – Sunday, 7/]**

\*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](#)



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## **Robotics & Arduinos Camp**

**Rising 2<sup>nd</sup> to 9<sup>th</sup> Graders**

**First for Youth Team**

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

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### **Rising 2<sup>nd</sup> to Rising 5<sup>th</sup> 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 23<sup>rd</sup> to June 27<sup>th</sup>**

**July 28<sup>th</sup> to August 1<sup>st</sup>**

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### **Rising 6<sup>th</sup> to Rising 9<sup>th</sup> 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 14<sup>th</sup> to July 18<sup>th</sup>**

**July 21<sup>st</sup> to July 25<sup>th</sup>**



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



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## **ROBOTICS BOOT CAMP**

**Rising 6<sup>th</sup> – Rising 9<sup>th</sup> Grade Students**

### **FIRST Tech Challenge Robotics Team & Metal Magic Inc.**

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This weeklong summer camp, hosted by the FIRST Tech Challenge (FTC) team Metal Magic, introduces students to the foundations of robotics through an exciting, hands-on learning experience! Through this course, students will explore some of the fundamentals of robotics, and will be able to build, program, and market their own FTC level and scale robot. Students will be split into two teams, and working through the week, each team will design and build their own robot, to complete a small game/problem statement. Mentors from Metal Magic will be there to guide students through the various complex electronics and mechanisms every step of the way through mini-lessons and working with the students through the problems they may encounter while building. Students will learn many skills associated with competition robotics such as programming in Java, how to build hardware mechanisms, robot design, and marketing and branding in the context of robotics competition. On the last day of the course, students will run the final test of their robot and see how efficiently it can complete the game. Parents are also invited at the end of the last day to see their student's creation! This course not only introduces students to technical skills, but also is a great opportunity to build on teamwork, problem solving, and creative thinking skills. No prior coding or building experience is needed for this camp. This camp is open to rising 6th, rising 7th, rising 8th graders, and rising 9th graders, and is limited to only 12 participants to ensure a valuable and engaging experience for all!

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

**\$295**

**IN-PERSON at South Riding center**

***Monday – Friday from 9am – 12pm***

**August 4<sup>th</sup>, 2025 – August 8<sup>th</sup>, 2025**



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



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## **Introduction to STEM Research Camp**

**Rising 7<sup>th</sup> – Rising 10<sup>th</sup> Grade Students**

**Rutvi Devani**

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During this **ONLINE, one-week course**, students will learn the foundations of how to conduct STEM based research writing to help them in their future endeavors in both high school and in college. Research skills developed early on would put your child at an advantage since research skills are not taught at all schools (yet it is expected at higher levels of education) giving a competitive edge to students who start learning early on. Whether for school projects, science fairs, or other competitions, this course will teach students step-by-step through the full research process on how to form strong questions, build hypotheses, and write each component of a research paper from introduction to conclusion. The course will also explore how research is conducted in a laboratory and outside of a laboratory, making this course practical for any student regardless of setting. By the end of the week, students will be able to write the full research paper, the abstract, and give "lightning talks" to present research. The skills learned in this week-long course would help the student learn to use the internet for research purposes, give a head start for STEM research internships and mentorships, build public speaking skills, and more.

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

**\$295**

**ONLINE**

***Monday – Friday from 9am – 12pm\****

**Dates: June 23<sup>rd</sup> – June 27<sup>th</sup>**



**[CLICK HERE FOR THE INTRO TO STEM RESEARCH CAMP ENROLLMENT FORM](#)**



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# COMPUTER COURSES

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## Intro to JAVA Course

Rising 7<sup>th</sup> Grade and Up

**Ronit Manchanda**

Introduction to Java is an **IN-PERSON/Online, three-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**

**ONLINE (HYBRID) / IN-PERSON**

**IN-PERSON at South Riding center**

*Tuesdays from 6:30 pm – 8:30 pm and Sundays from 3 pm – 5 pm*

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

**[Tuesday, 7/15 – Sunday, 8/3]**



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



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## 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 9<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup> or 12<sup>th</sup> 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*

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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*

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