



# NOVA

10 <b>S</b> Science	20 <b>T</b> Technology	20 <b>E</b> Engineering	18 <b>M</b> Math
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LOUDOUN CAMPUS

# DAY

October 20<sup>th</sup>, 2018  
10:00 AM – 4:00 PM

<p>NORTHERN VIRGINIA COMMUNITY COLLEGE EDUCATIONAL FOUNDATION www.nvcc.edu/foundation</p>	<p>Micron®</p>	<p>Oath: A Verizon company</p>	<p>Loudoun County Public Schools Established in 1870</p>
<p>NOVA Northern Virginia Community College Loudoun Campus</p>	<p>NOVA   SYSTEMIC</p>		

## HEC (Higher Education Center)

### **Design Technology: Explore Your Artistic Potential**

**Location:** HEC 112

**Ages:** 3<sup>rd</sup> grade & up

Come experiment with Adobe Illustrator and construct a fun do-it-yourself cartoon character.

### **Underwater Robotics Demonstration**

**Location:** HEC Patio

**Ages:** All ages

Drive our underwater robots! Presented by the *U.S. Navy's Center for Excellence in Ships and Ship Systems*.

### **Build Your FLEET: In-Water and Virtual Ship Design**

**Location:** HEC 1<sup>st</sup> Floor

**Ages:** All ages

Aspiring engineers will build boats using recyclables to accomplish specific missions. Then, build mission-specific ships virtually using the FLEET free video game. Presented by the *American Society of Naval Engineers*.

### **The Art of Problem Solving Academy**

**Location:** HEC 1<sup>st</sup> Floor

**Ages:** All ages

### **ISACA Greater Washington DC Chapter**

**Location:** HEC 1<sup>st</sup> Floor

**Ages:** 6<sup>th</sup> grade & up

Come and learn what's in it for you at ISACA!

### **Virginia 529**

**Location:** HEC 1<sup>st</sup> Floor

**Ages:** All ages

Learn about the Virginia 529 college savings plan and give our prize wheel a spin!

### **School of Rock**

**Time:** 11:00 AM – 4:00 PM

**Location:** HEC 110

**Ages:** 3<sup>rd</sup> grade & up

Check out NOVA's state-of-the-art music recording studio. Snap a selfie as you perform a song for your adoring fans!

### **Flubber Bubbles & Skittles Science (Thomas Jefferson H.S. TWIST)**

**Location:** HEC 1<sup>st</sup> Floor

**Ages:** Pre-K to 8<sup>th</sup> grade

Discover non-Newtonian liquids, by making flubber bubbles! Use a straw to see who can blow the biggest bubble. Then, experiment with Skittles. Who knew candy could be so smart?

### **Russian School of Mathematics**

**Location:** HEC 1<sup>st</sup> Floor

**Ages:** All ages

Math is fun! Come check out our math activities, puzzles, games, and prizes!

### **Toshiba/National Science Teacher Association**

**ExploraVision**

**Location:**

**HEC 1<sup>st</sup> Floor**

**Ages:** All ages

Check out previous national ExploraVision science competition winner projects and try our hands on activity!

### **VEX Robotics with Riverside High School (LCPS)**

**Location:** HEC 1<sup>st</sup> Floor

**Ages:** 6<sup>th</sup> grade & up

Drive, test, and maneuver VEX VRC robotics with local high school pros!

### **Robot Driving Station with Team Geared UP!**

**Location:** HEC 1<sup>st</sup> Floor

**Ages:** 3<sup>rd</sup> to 8<sup>th</sup> grade

Come check out our robots and take them for a test drive!

### **Soils and the Water Table**

**Interactive Model with Loudoun  
Water**

**Location:** HEC 103

**Ages:** Pre-K to 5<sup>th</sup> grade

A live, active demonstration on how water on our planet flows right under our feet!

### **TLC SmartTECH: STEM and Makerspace Solutions**

**Location:** HEC 1<sup>st</sup> Floor

**Ages:** All ages

TLCSmartTECH will have some of their favorite STEM and Makerspace products on display for hands-on demonstrations.

### **Ultraviolet Radiation**

**The Academies of Loudoun  
(LCPS)**

**Location:** Outside HEC

**Ages:** Pre-K to 5<sup>th</sup> grade

Did you know the sun gives off energy that we can see (visible light) as well as energy that we cannot see (ultraviolet rays)? Stop by our activity to observe the effects of ultraviolet rays!

### *Special Parent Session*

**Cybersecurity: Keeping Secure  
in the Digital World**

**Time:** 11:00 AM – 11:45 PM

**Location:** HEC 104

**Ages:** 6<sup>th</sup> grade & up

Protect yourself and your children from cyber criminals! This session will educate parents on what they can do to keep themselves, their family, and loved ones secure while using digital media (phones, email, internet, computer, social media, etc). Cyber expert Babur Kohy will arm parents with information on detecting, deterring, and countering the cyber predator.

### **Game Design with Mason Game & Technology Academy**

**Location:** HEC 2<sup>nd</sup> Floor

**Ages:** 6<sup>th</sup> grade & up

Love gaming? Learn about the art and science of video game design!

### **Loudoun County Public Library Makerspaces**

**Location:** Outside HEC 204

**Ages:** All ages

Learn about the resources available at Loudoun County Public Library branches and Makerspaces. There will be 3D printing and hands-on activities to try!

### **Maker Faire NoVa & NoVa Labs**

**Location:** HEC 204

**Ages:** 3<sup>rd</sup> grade & up

Visit some of our local Makers as they show us and tell us about what they're making.

### **Psychology IS a Science**

**Location:** HEC 2<sup>nd</sup> Floor

**Ages:** Pre-K to 8<sup>th</sup> grade

Celebrate the scientific studies of the senses! Learn about sensation, perception and classical conditioning. Taste our treats, check out optical illusion demos, and more!

### **NOVA SySTEMic**

**Location:** HEC 203

**Ages:** All ages

Learn about programming and robotics using VEX, Sphero, and Osmo platforms!

### **FIRST Tech Challenge: FIRST Robotics of Gainesville (FROGbots) & X-BOTS, FTC Team 6700**

**Location:** HEC 203

**Ages:** All ages

We've got a hands-on robotics booth and information about worldwide STEM competitions.

### **Phone Programming with AppInventor**

**Location:** HEC 214

**Ages:** 3<sup>rd</sup> grade & up

Using provided phones, students will be guided through tutorials to create their own mobile applications.

### **Be a Chemist with Children's Science Center**

**Location:** HEC 2<sup>nd</sup> Floor

**Ages:** All ages

Come join us with interactive, hands on chemistry experiments and activities and get ready for the upcoming National Chemistry Week!

## LS (Science) Building

### **A Career in Veterinary Technology**

**Location:** LS 102

**Ages:** 3<sup>rd</sup> grade & up

Would you like a career caring for animals? We have interactive stations for learning animal anatomy, microscope slides such as parasites and animal cells, interesting radiographs, hands-on bandaging techniques, and other related animal nursing skills.

### **Phun with Physics!**

**Location:** LS 102

**Ages:** 3<sup>rd</sup> grade & up

Come learn about the principles of physics. Join us for demonstrations on gravity, velocity, and more!

### **The Wonderful World of Biology**

**Location:** LS 123

**Ages:** All ages

Examine fossils from the Chesapeake Bay, touch a live blue crab, view your cheek cells under a microscope, and create an electrocardiograph (ECG) of the electrical activity of your heart. There will also be Legos to play with & pictures of the bay to color!

### **Volcanoes!**

**Location:** LS 123

**Time:** 10:00 AM – 12:00 PM

**Eruptions @ 11, 12, 1:00**

**Ages:** All ages

Is the largest volcano in our solar system found on our planet Earth? Come by to find out more and see a demonstration of a volcanic eruption!

### **Clone Wars & Bug Battles**

**Location:** LS 114

**Ages:** All ages

Ever wonder how you can clone a plant? Make a cutting from a Jade plant that will make an exact copy of the "mother plant." Take home your cutting and watch it grow! Observe and learn how to identify imported invasive insect species that are coming to Loudoun County. Stop them in their tracks!

### **Our Mysterious Planet**

**Location:** LS 131

**Ages:** All ages

See our cool minerals, rocks, fossils, and geologic processes on display and learn the secrets of our mysterious planet.

## B-2 Parking Lot

### **The Washington Capitals Street Caps Driven by AAA**

**Location:** B2 Parking Lot

**Ages:** All ages

Show your Caps pride and play a little hockey while you're here!

### **Stomp Rockets**

**Location:** B2 Parking Lot

**Ages:** All ages

Build your vessel and launch it high into the air! Up, up, and away!

### **This Year's Food Trucks:**

