Microsoft Store Student Programing Guide





Microsoft Stores Galleria

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2018-2019 YouthSpark Student Curriculum Houston Galleria

YouthSpark 2-hour Workshop: Shoot, Edit & Share with PicsArt

Learn how to transform photos into works of art! Students can increase their editing confidence and creativity with PicsArt—an interactive editing, drawing, and collage app that includes numerous photo-editing features, customizable filters, text options, and a camera. This workshop is available for students ages 8-13+. No experience with Windows 10 is required.

At the end of this workshop, participants will:

- Understand composition and best practices for photography
- Learn to sketch and turn anything into a drawing
- Create easy graphic design edits and make amazing photo edits
- Have had a fun, hands-on scavenger hunt that uses key technologies throughout the store
- Leave with a certificate of completion and image portfolio

YouthSpark Camp: Shoot, Edit & Share with PicsArt

Increase your editing confidence and creativity with this free YouthSpark Camp. During this **four-part camp series**, students will learn how to use PicsArt, an interactive editing, drawing, and collage app. This app, which is available on Windows 10 devices, includes numerous photo-editing features, customizable filters, text options, a collage maker, and a camera. Learn how to transform photos into works of art with just the tip of your finger. This four-part camp lasts two hours per session, and campers must attend the sessions consecutively. This workshop is available for students ages 8-13+. No experience with Windows 10 is required.

At the end of this camp, participants will:

- Know how to use a powerful photo-editing software
- Understand composition and best practices for photography
- Learn to sketch and turn anything into a drawing
- Create easy graphic design edits
- Create amazing photo edits
- Leave with a certificate of completion and an image portfolio



YouthSpark Camp: Make Your Own Movie with 3D and Mixed Reality

In this **four-day, 2-hour camp series**, students create unique movie projects using Microsoft's latest 3D drawing and movie-making applications. Campers feature each other in the videos alongside 3D characters and creatures, while learning movie-making basics like character development, storyboarding, shooting, editing, and sharing. This workshop is available for students ages 8-13+. No experience with Windows 10 is required.

At the end of this camp, participants will:

- Learn how to use Paint 3D, Mixed Reality Viewer, and the Photos app for creative projects.
- Complete a movie they can share with friends and family.
- Participate in their own movie premiere at the final camp session.

YouthSpark 2-hour Workshop: Create amazing videos with mixed reality and 3D

During this 2-hour workshop students come and learn new ways to create video stories with Paint 3D and Photos, one of the newest Windows 10 creativity apps. Play with mixed reality by taking a picture of a 3D monster running after your friends and add it to your video. Or play with 3D effects like lightening and bubbles. By the end of the workshop, students will have created their own minimovies with 3D models, Windows Ink, special effects, and a soundtrack. This workshop is available for students ages 8-13+. No experience with Windows 10 is required.

YouthSpark 2-hour Workshop: Get creative with 3D in Windows 10

The world we live in is multidimensional, so shouldn't our art be as well? Student will bring their imagination to life by learning new Paint 3D in Windows 10. This free 2-hour workshop offers a high-energy, collaborative environment for participants to fuel their creativity and learn key tools and features of the 3D app. This workshop is available for students ages 8-13+. No experience with Windows 10 is required.

At the end of this workshop, participants will:

- Learned the fundamentals of the Paint 3D app and all about Remix3D.com community
- Learned how to express their ideas in three dimensions by creating their own 3D designs
- Hands-on experience with Microsoft devices and software via a scavenger hunt through the Microsoft store

YouthSpark Camp: Get Creative with 3D in Windows 10

The world we live in is multidimensional, so shouldn't our art be as well? Student will bring their imagination to life by learning new Paint 3D in Windows 10. This **four-part camp series** offers a high-energy, collaborative environment for participants to fuel their creativity and learn key tools and features of 3D in Windows 10. This four-part camp lasts two hours per session, and campers must attend the sessions consecutively. This workshop is available for students ages 8-13+. No experience with Windows 10 is required.

At the end of the camp, participants will:

- Learn the fundamentals of the Paint 3D app and all about Remix3D.com community
- Learn how to express their ideas in three dimensions by creating their own 3D designs
- Create a group story illustrated with participant's 3D art

YouthSpark 2-hour Workshop: Create Digital Art with Fresh Paint

In this hands-on 2-hour workshop, students will learn to create and share their own digital art with the Fresh Paint app for Windows 10. They'll explore the basics of Fresh Paint, using lifelike oil and watercolors, pastels, and more to craft their own creations. They'll also get a sneak peek of advanced digital art skills like mixing paint and layering media. Activities will focus on learning through experience and peer-to-peer learning, and themes may be based on upcoming seasons and special events. This workshop is available for students ages 8-13+.

At the end of the workshop, participants will:

- Be familiar with the creative possibilities of digital drawing and painting
- Have experience with the Fresh Paint layout and tools
- Create original artwork and share it with peers
- Learn how to share their art with the swipe of a finger

YouthSpark 2-hour Workshop: Make your Own Story with PowerPoint and Word

In this hands-on 2-hour workshop, students will learn how to create and tell a story using Microsoft PowerPoint and Word. They will explore using drawing tools, selecting and sizing images and icons, creating backgrounds and changing fonts. Activities will focus on learning through hands on guided experiences and collaborative learning in small groups. This workshop is available for students ages 8-13+. No experience with Windows 10 is required.

At the end of this workshop, participants will:

- Be familiar with key tools in PowerPoint and Word
- Feel confident using a Surface Device and Pen
- Create an original story with text and images in a small group

YouthSpark 2-hour Workshop: Create Wow Presentations & Projects with Sway

This free 2-hour workshop introduces students ages 13 plus to the ease and endless possibilities of Sway. Participants will learn tips for creating and delivering a wow presentation or project, and immediately implement them as they create a presentation from start to finish. Participants will also practice their communication skills and stage presence as they present their Sways to one another.

At the end of this workshop, participants will:

- Tips and techniques for designing and delivering a wow presentation or project
- To create a multimedia presentation in Sway from start to finish and share it with others
- how to use Sway for both school and personal projects and presentations

YouthSpark Camp: Create a Difference in your World

In this **four-day, 2-hour camp series** students research and identify a cause they care about in their local community, and create action plans to fundraise, volunteer, or get the word out about their personal cause. This workshop is available for students ages 8-13+. No experience with Windows 10 is required.

At the end of the camp, participants will:

- Learn to research areas of interest.
- Develop personal passions and understand new ways to make connections with others.
- Gain new skills with Microsoft Office and Windows 10 applications, such as Word, Excel, Cortana, Sway, Whiteboard, and Photos.



YouthSpark 2-hour Workshop: Code and Create Games with Ozobot

In this free hands-on 2-hour camp, students will learn to code and create games with Ozobot robotics. They'll explore programming the Evo robot with block coding, from completing simple commands right through to creating a dance game. They'll also learn how robotics are used in the 21st Century and be inspired with how they can be involved. This workshop is available for students ages 8-13+.

At the end of this workshop, participants will:

- Be familiar with how robots work
- Have hands-on experience with block coding and how to program the Evo robot
- Understand the importance of robotics

YouthSpark 2-hour Workshop: Kodu Learning to Code

In this series, participants new to coding and game design learn all the basics using Kodu and Surface Pro. Join the Kodu Game Lab community when you download the free Kodu software. Throughout the series, you'll learn the ins and outs of coding as you have fun creating commands, building environments, and sharing with others. In this workshop, participants will try out a scavenger hunt in the store. Next, participants will build their own world in Kodu by creating a landscape and adding characters to it which includes moving a castle!

At the end of this workshop, participants will:

- Identify some of the most popular games and coding examples
- Relate physical commands to creating coding lines
- Identify features and capabilities within Kodu and the Kodu Game Lab community
- Use the Surface Pro to access the Windows Store and Kodu

YouthSpark 2-hour Workshop: Code and Create with Collage Me

In this free two-hour programming Workshop, student will learn how to code in work in a real software development environment, Touch Develop, while using their creativity and imagination to design a unique personal collage that can be shared with family and friends. They'll also enjoy a fun, hands-on scavenger hunt where they can interact with key technologies throughout the store. This workshop is available for students ages 8-13+. No experience with Windows 10 is required.

At the end of this workshop, participants will:

- Have increased confidence in their technical and coding skills
- Improve their computational and creative thinking
- Read and understand code in the Touch Develop environment
- Create and publish a coded script containing a personal collage
- Leave with a certificate of completion

YouthSpark Camp: Learn to Code with Flatverse

In this free coding camp, students and over will use Touch Develop, an interactive programming environment website, to create and publish their own video game called Flatverse. As they build their game, they learn about various computer programming and coding concepts, including screen coordinates, random numbers, objects and functions, and more. Throughout the camp series, they will take a deeper dive into these programming and coding concepts to gain more confidence and skill. The goal is for participants to gain an appreciation for coding's role in the games they may play in their daily lives, and to provide an inspirational foundation for pursuing their interest in computer science. This four-day camp lasts two hours per day, and students must attend the days consecutively. This workshop is available for students ages 13+.

Minecraft: Hour of Code 90-minute Workshop

Join us for this free, 90-minute workshop to take part in the global Hour of Code movement. Go behind the scenes to learn how to code, program, and play in your own Minecraft world. You'll use fun, interactive coding to learn how creativity and problem solving come together to make something all your own. No experience with Minecraft or coding is required. This workshop is available for students ages 8-13+.

At the end of this workshop, participants will:

- Create a list of coding instructions including loops and functions
- Instruct a computer to perform tasks in a sequence
- Test and refine their coding instructions to complete a task



Play and Make Code with Minecraft 2-hour Workshop

In this two-hour coding workshop, students will play in Minecraft while they learn how to code with the Microsoft Make Code platform. They will program an Agent robot to complete challenges and even change the weather, or as they say in the world of Minecraft: they'll make it rain ocelots and wolves! No experience with Minecraft or coding is required. This workshop is available for students ages 8-13+.

At the end of this workshop, participants will:

- Increased confidence in their technical and coding skills
- Improved their computational and creative thinking
- Read and understand code in the Make Code environment
- Programmed code in Minecraft to change the weather and control an agent

STEM Saturday- Building Machines that Emulate Humans



The Hacking STEM Workshop gives participants the full lesson for Building Machines that Emulate Humans lesson that the first STEM Saturday was built from. This integrates life science with robotics while incorporating crucial 21st-century technical skills. Computer and data sciences, along with mechanical and electrical engineering, are integrated to provide an authentic learning experience. Emphasis is placed on the importance of combining science and technology to reflect the mechanics of the human body. This workshop exposes participants to the phenomenon of human body mechanics and helps them discover how it is influencing robot design. In some cases, this experience may start students on their journey of using these types of applications that they need as students today and will use as the workforce of tomorrow.

In this hands-on workshop, students build a sensor equipped glove and a robotic finger from everyday objects including cardboard and straws to understand the anatomy and biomechanics of the human hand. Then, they control the robotic finger with the sensor equipped glove and conduct trials visualizing data in Excel to generate new ideas for improving its performance.

During the workshop, participants will:

- Build a flex sensor out of everyday objects and construct a sensorized finger to control the robotic hand
- Study the anatomy and biomechanics of the human hand and build a model robotic hand
- Analyze sensor data in Excel to test and modify the robotic hand

At the end of the camp, participants will take home the sensorized glove and robotic hand that they built during the camp (excluding the microcontroller)

Hacking STEM- Using Computational Thinking to Understand Earthquakes



In this Hacking STEM Workshop, core earth science ideas are integrated with important 21st century technical skills. Emphasis is placed on combining science, engineering and technology to gather and visualize earthquake data critical for making informed decisions about human safety. In this lesson, Microsoft partners with the California Academy of Sciences (CAS) and KQED to investigate seismic activity.

Students build a seismograph to visualize earthquake data and explore modern engineering techniques used to mitigate earthquake damage. Then, they engage in an Excel big data activity to understand plate tectonics.

During the workshop, participant will:

- Take on the role of electrical, mechanical and software engineers and data scientists.
- Build a seismograph using inexpensive materials.
- Use data generated from student built seismographs to compare seismic events.
- Record ideas and findings in a student journal.

Office & Career Workshops



Jump Start Your Job Search

This six-part workshop series to jump start your job search. Build your skills and feel confident and comfortable with each of the Office applications. Augment your skillset, and learn how to quickly and effectively demonstrate your experience with these important business tools during our workshop series that includes: (This workshop can be condensed to a one day-4-hour workshop with lunch break)

- 1. Build your Resume in Word
- 2. Manage a Budget in Excel
- 3. Managing Emails & Meetings in Outlook
- 4. Create an Effective Presentation in PowerPoint
- 5. To Do Lists and Meeting Notes in OneNote
- On the Move with Office 365

Office 365 Student Productivity Workshop

Office 365 has a ton of features and tools that will make studying easier and your time not only more productive, but fun? Learn tips and tricks within the many programs included with Office 365, including how to use:

- 1. **Multi-Tasking** and **Snap:** to make switching between your study tools and notes easier.
- 2. **Cortana** to help you find information, send reminders and keep you on track
- 3. **OneNote:** for handy study and note-taking, including audio and video recording, audio tagging, math problem-solving and collaborative working features
- 4. **PowerPoint Office Mix:** a cool feature with voice-over capability
- 5. Sway: It's an easier way to make your presentations shine—without having to know graphic design
- 6. Word: track edits and bibliography features.
- 7. Excel: It's more than just a spreadsheet program. Use it for statistical analysis, chart and graph building and even as a survey tool

YouthSpark Camp: Productivity Tools for School

This, in-depth, **four-part series** designed to empower students with critical organizational and technology skills to do more in school and life. Each of the four workshops offers two hours of hands-on interactive learning through the planning and development of a fundraising campaign for a social good project of their choosing. By the end of the series, students will gain functional understanding of Microsoft productivity tools and applications—including Office, Windows 10, and Surface—so they can apply their new knowledge and skills to school, life, and career. The series covers research, planning, creative, and presenting techniques in sequence, and culminates in students sharing their work with the class. This workshop is available for students ages 8-17+.

Microsoft Job Shadow Field Trip

This workshop allows high-achieving students an opportunity to experience the Microsoft retail store from the inside. Participants will get their hands-on Microsoft's latest platforms and devices. From discovering more about Microsoft as a business, a culture and as a career, to identifying resume building skills that they already have, this workshop sets students on a path to employment. With career and interview tips shared by store associates from all walks of life, students learn that there are many paths to success! Students hear about how the occupational journey is unique to their skills, interests, and goals.

YouthSpark: DigiGirlz

This free, 2-hour DigiGirlz Workshop at your Microsoft Store is a fun way for girls in middle school and high school (ages 14-18) to understand why computer science is important, and to use computer science to enhance things they already love doing, both now and in the future. What's more, they'll get an inside peek at what it's like to work in technology; learn how to pursue their passion; and see that a successful career in technology is within their reach. The Workshop includes an inspiring presentation from real, local women in the industry and a Q&A session. During the second hour, the girls will also get hands-on with our Hour of Code session, which teaches coding fundamentals. At the end of the Workshop, they'll see cool resources that can be used to learn how to make awesome stuff with computer science.

Scout Fieldtrips and Workshops

Scout Field Trip: Photography for Scouts- Photography Badge

Snapping and sharing a photo has never been easier. Scouts can use photographs to capture family memories, good times with friends, and selfies. Photography also allows Scouts a chance to be creative and express their imagination using photographic elements such as lighting, composition, depth, color, and content. Going far beyond taking the ubiquitous selfie, in this workshop, Scouts will learn to take expressive photographs, edit them, and present them as objects of art using a variety of Microsoft products and devices.

At the end of this workshop, Scouts will:

- Work through a variety of activities necessary to obtain a Digital Photographer Badge/ Belt Loop from their respective Scouts organization
- Learn about the history of photography and the development of cameras
- Understand composition and make amazing photo edits using a Surface Pro and Windows 10

Scouts play new games on Xbox360 and have a blast trying new activities on the latest available apps and Microsoft devices

Scout Field Trip: Salesmanship and Public Speaking for Scouts

Give your Scouts the power to write and the confidence to address a crowd in public. Public speaking is rarely a favorite, easy, or fun task, but it can be! With the skills and tips offered in our 2-hour workshop, Scouts, ages 12-14 will work through a variety of age-appropriate activities necessary to obtain a Salesmanship merit badge (Boy Scouts) or a Cadette Public Speaker badge (Girl Scouts).

A confident speaker has the skills to connect with an audience, to persuade them or to share an experience. Those who can be themselves while speaking self-assuredly to one person—or a crowd—will benefit from this important life skill. Participants conduct an interview of a salesperson, use their favorite Microsoft products to search for a presentation topic and create a unique PowerPoint presentation as a visual aid. With a Dance off Challenge on Xbox for good measure, your scout will be much more comfortable sharing their reasoned thoughts with a crowd.



At the end of this workshop, Scouts will:

- Complete 80 percent of the requirements needed to earn their badges
- Understand more about the power of confidence and performing in public
- Be able to explain how to research a topic and share it with others

Scout Workshop: Computer Expert Badge

In this two-hour workshop, Scouts work through a variety of the exciting activities necessary to obtain a Computer Expert Badge. Participants will get hands-on experience with the latest apps and devices from Microsoft to discover the versatility of computers, learn Internet safety and lots more! From using Bing to conduct research and plan an adventure, to creating a photo presentation for their friends, Scouts will feel empowered to use their new skills with their troop and in the classroom. Gamers will have the opportunity to challenge themselves and others as they try out the newest versions of Kodu, Project Spark, and Just Dance on Xbox!