

2023

2024

School

Year

Enrichment

Classes

 $\cdot \, \mathsf{Code}$

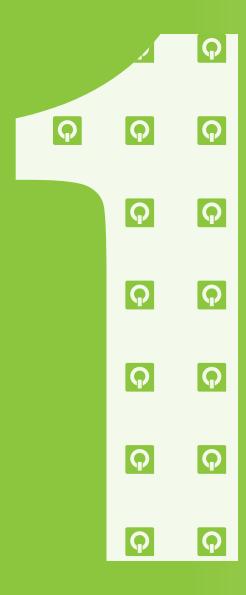
·Play

· Design

·Robotics

Repeat





HackShack is an after-school enrichment program that takes your child's learning to the next level. Our STEAM-based coding, design, and robotics classes inspire curiosity and ignite creativity. Utilizing popular game formats like puzzles, Minecraft and LEGO Robotics, students develop computational thinking, teamwork, and persistence skills.

Game-based learning is a proven pedagogical approach that enhances motivation, engagement, and retention. By transforming complex concepts into fun and interactive challenges, students not only grasp the material faster but also develop a deeper understanding. They learn to experiment, iterate, and adapt - crucial skills in today's rapidly evolving world.

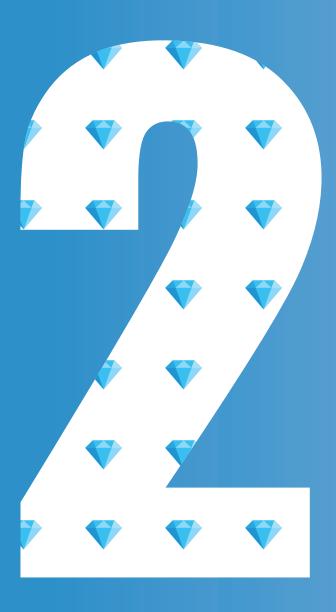
A quote by Diane Ackerman, a renowned American poet, writer, and naturalist, captures this sentiment nicely:

"Play is our brain's favorite way of learning."

It succinctly encapsulates the essence of playful learning, underlining the joy and engagement that comes from exploration and creativity, which makes play such a powerful facilitator for learning.

Moreover, game-based learning fosters an environment of collaboration and healthy competition, promoting teamwork and social skills. It also cultivates resilience and patience, as students learn to navigate challenges and setbacks in the game setting.

At HackShack, we don't only impart knowledge, we inspire future-ready innovators and problem-solvers. We believe in the power of game-based learning to make this vision a reality, one exciting and fun lesson at a time.



// Minecraft Coding //



Coding Level 1: K - 1st grade

Code Crafters

Introduces computational thinking through block-based coding as a simple introduction to computer science. The game-based activities and challenges nurture early skill development, emphasizing responsibility, problem-solving, self-management, and teamwork.

Coding Level 1: 2nd-5th grade

Code Builders

Introduces computational thinking through block-based coding as a simple introduction to computer science through modding and command blocks. The game-based activities and challenges nurture early skill development, emphasizing responsibility, problem-solving, self-management, and teamwork.

Advanced Coding: Level 2: K - 1st grade

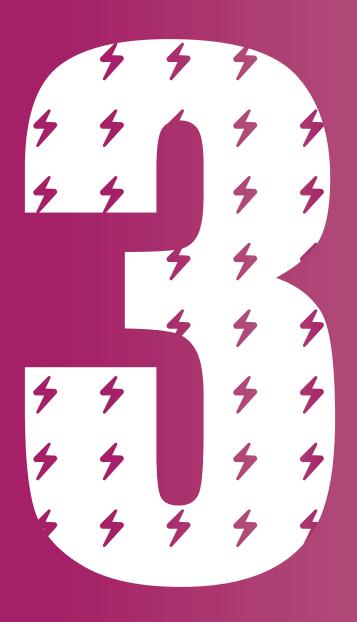
Code Champs

Beyond refining their computational thinking skills, this course encourages advanced problem-solving, strategic thinking, and teamwork, all while fostering a profound understanding of the interconnected systems within game development.

Advanced Coding: Level 2: 2nd-5th grade

Code Wizards

Students will learn how to create, balance, and test their own games, understanding the key principles of game mechanics, player engagement, and story development. Alongside game design, this course enhances creativity, critical thinking, problem-solving, and digital literacy, enabling students to transform their imaginative ideas into playable game experiences.



// Lego Coding & Robotics //



LEGO Coding & Robotics Level: 1 K - 1st grade

Robotic Realm

An innovative course that introduces the hands-on world of LEGO Robotics. Students will engage in building and programming their own LEGO robots, discovering key concepts in mechanics, automation, and control systems. This engaging class fosters critical thinking, problem-solving, creativity, and teamwork, equipping students with a blend of technical and soft skills.

Advanced LEGO Robotics: Level 2: K - 1st grade

Robotic Odyssey

Leveraging the interactive LEGO Robotics platform, learners will undertake more complex projects, exploring advanced programming, intricate mechanical designs, and sophisticated automation techniques. Alongside deepening their robotics knowledge, this course cultivates enhanced problem-solving, critical thinking, and teamwork skills.

LEGO Coding & Robotics Level 1: 2nd-5th grade

Robotic Pioneers

Students will engage in building and programming their own LEGO robots, discovering key concepts in mechanics, automation, and control systems. This engaging class fosters critical thinking, problem-solving, creativity, and teamwork, equipping students with a blend of technical and soft skills.

Advanced LEGO Robotics: Level 2: 2nd-5th grade

Robotic Masters

Students will undertake more complex projects, exploring advanced programming, intricate mechanical designs, and sophisticated automation techniques. Alongside deepening their robotics knowledge, this course cultivates enhanced problem-solving, critical thinking, and teamwork skills.



// Minecraft Design //



Design Level 1: K - 5th grade

Minecraft Mastery

A beginner's course that introduces the fundamentals of Minecraft, covering gameplay, navigation, building, and resource management. This immersive experience enhances key skills such as teamwork, creativity, spatial awareness, and problem-solving, setting the foundation for more advanced explorations within the Minecraft universe.

Design Level 1: 2nd-5th grade

Architecture

Students will not only learn about different architectural styles, historical buildings, and construction methods, but they'll also have hands-on experience of designing, constructing, and modifying their own virtual buildings. Beyond architecture, this class will enhance critical thinking, spatial reasoning, teamwork and creativity.

Design Level 2: K - 5th grade

Minecraft Pioneers

This class delves into advanced Minecraft exploration, teaching complex building, redstone mechanics, and survival strategies, with an introduction to modding and command blocks. This immersive experience enhances key skills such as teamwork, creativity, spatial awareness, and problem-solving,

Design Level 2: 2nd-5th grade

Rocket Building

Students will delve into the principles of propulsion, aerodynamics, and rocket design as they construct and launch their own virtual rockets. This course not only ignites an interest in aerospace engineering, but also enhances critical thinking, problem-solving, creativity, and teamwork.

"Design is not just what it looks like and feels like. Design is how it works."
- Steve Jobs



// 2D & 3D Design //



Design Level 1: K - 5th grade

Graphic Geniuses

Introduces students to the basics of graphic design. Learners will understand fundamental design elements such as color theory, typography, and layout design. This course cultivates creativity, attention to detail, problem-solving, and digital literacy, offering an exciting and practical start to Gravit Designer platform.

Design Level 2: K - 5th grade

Graphic Gurus

Students will master advanced Gravit Designer techniques including vector design, complex layout creation, and digital illustration. Beyond advancing their design skills, this course nurtures advanced problem-solving, critical thinking, and digital literacy, equipping students with the expertise to create professional-grade graphics.

3D Design Level 1: 2nd-5th grade

3D Dreamers

This introductory course uses the Tinker-cad platform to expose students to the captivating world of 3D design. Participants will learn basic concepts such as object manipulation, shape design, and model creation. This course develops spatial awareness, problem-solving, creativity, and digital literacy.

3D Design Level 1: 2nd-5th grade

3D Innovators

Students will explore advanced techniques including intricate model creation, design optimization, and 3D printing preparation. The course also fosters advanced problem-solving, critical thinking, and digital literacy, preparing students for future pursuits in 3D design, 3D printing and engineering.

"Play is not frivolous. Play is brain building. Play is fundamentally important for learning 21st-century skills, like problem-solving, teamwork, and creativity." Kathy Hirsh-Pasek



// Game & App Development Coding //



Coding Level 1: K - 5th grade

Game Creators

Is an exciting course that introduces the basics of game design using the intuitive block based coding, Kodu platform. Students will learn to build, navigate, and modify their own 3D game worlds, gaining hands-on experience with game mechanics, character development, and level design. This course enhances critical thinking, problem-solving, creativity, and digital literacy.

Coding Level 1: 2nd-5th grade

App Artisans

Is a dynamic course that introduces the fundamentals of app design using the user-friendly text based coding, Bitsbox platform. Students will learn to develop their own mobile applications, exploring key aspects of user interface design, functionality programming, and testing procedures.

Coding Level 2: K - 5th grade

Game Innovators

Is a comprehensive course designed to expand students' game design knowledge and skills using the engaging block based coding, Kodu platform. Learners will delve deeper into complex game mechanics, advanced character interactions, and sophisticated level designs, creating more immersive and intricate gaming experiences.

Coding Level 2: 2nd-5th grade

App Architects

Is an in-depth course that dives further into the realm of app design using the interactive text based coding, Bitsbox platform. Students will navigate more complex tasks, such as advanced user interface designs, intricate functionality programming, and robust testing and debugging techniques.



In August 2016, we embarked on a remarkable journey with the launch of HackShack, building a vibrant community of forward-thinking parents and inquisitive children, all united by the joy of creation. Every day, we witnessed our vision come alive, whether during our after school enrichment program, summer camps or through collaborations with schools and local community centers.

In 2020 a response to the pandemic, we've transitioned from our physical space into a dynamic digital format. This strategic move, amplified by our valued partnerships with schools and local community centers, has allowed us to expand our reach, touching even more lives. Amid change, our commitment to inspiring creativity remains intact.

Today, we celebrate this resilience and the continued joy of seeing our vision materialize every day, across enrichment programs, and summer camps, through our partnerships with schools and local community centers.

I hope this brochure finds you well and sparks your interest in the

innovative world of HackShack.

As we unveil our new class offerings for the 2023-2024 school year, we invite

you to explore the exciting opportunities that await your children or stu-

dents. From block-based visual coding to text-based coding, from design

to robotics, we strive to offer a diverse range of activities that cater to every

interest and skill level.

It would be a pleasure to arrange an opportunity to bring our enrichment

classes to your school or community. Our team is excited to show you first-

hand the magic that happens when children are empowered to create, not

just consume technology. Please don't hesitate to reach out to me at mike@

hackshackstudio.com to arrange a meeting or demo class.

It's time to take the next step in your child's or student's education and into

the future with HackShack. We look forward to partnering with you to in-

spire the next generation of creators, thinkers, and leaders.

Here's to a future full of creativity, learning, and growth!

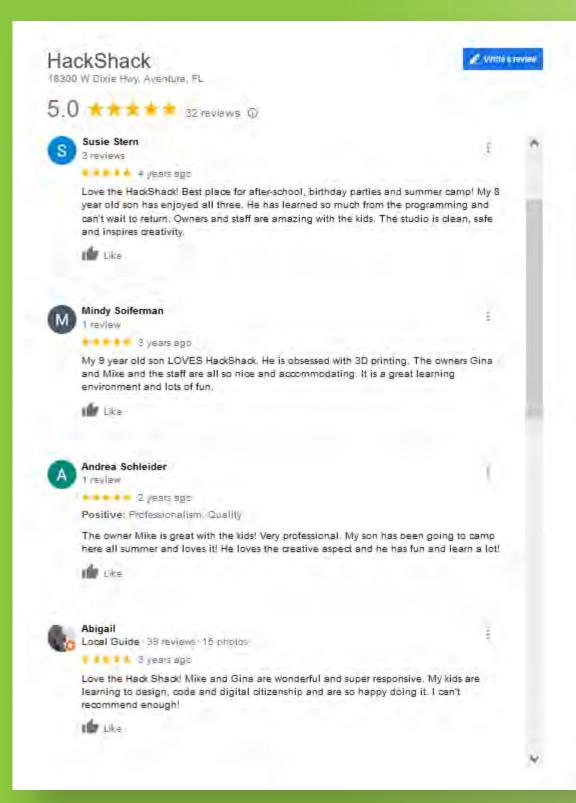
Best Regards,

Michael Hickey

Michael Hickey

Co-founder and President









Visit us for class updates:

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