GBL: Minecraft™

Zane Math

Game Modding

3D Printing

Art & Design

Computer Programming

Engineering

zaniac™

K-8 STEAM After-School Programs & Camps

Programs

Robotics

Kerbal Space Program

Zane Prep

GarageBand®

Chess

What is Zaniac?

"Zaniac helps children understand how the world was built and gives them the confidence and tools to make it better." – Professor Paul Zane Pilzer, Zaniac Founder

At Zaniac, pre-K-8th grade kids discover how much fun Science, Technology, Engineering, Arts and Math (STEAM) learning can be. Zaniac's fun enrichment programs and high-tech learning environment engage kids in creative, conceptual problem solving that builds confidence and helps them succeed in school.

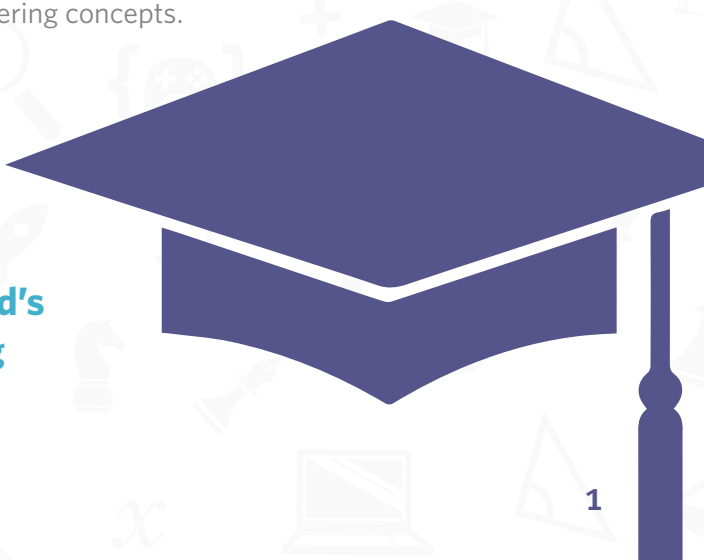
Zaniac's programs teach 21st century skills in a way that feels like play.

Kids can learn how to code—going from building games with Scratch to writing codes in Python and Java.

Game-Based Learning using Minecraft™ capitalizes on the love kids already have for the game to teach concepts ranging from natural sciences to physics.

We use modular LEGO® systems designed for education in our robotics courses to explore scientific and engineering concepts.

And that's just the beginning.



Ignite your child's love of learning at Zaniac!

Zaniac's $\sqrt{100}$ Principles

Our Mission

$(-1)^2$ Ignites imagination & natural curiosity to unleash a child's potential

$\begin{array}{r} 206 \\ \underline{-204} \end{array}$ Engages kids in peer-based learning with friends in an environment that feels like play

$\sqrt{9}$ Instills a love of learning & empowers kids with 21st century technology skills to change the world

$\sqrt[3]{64}$ Provides kids with a real academic edge to succeed

$\frac{5\pi}{3{,}141592654}$ Gives kids the confidence to be curious, explore new concepts and innovate to solve problems

$3!$ Leverages education and tutoring to provide parents with their child's daily progress

$\sqrt{9}+\sqrt{16}$ Impacts the community through role model instructors—high school & college students—passionate about inspiring kids with STEAM

2^3 Creates a positive and safe place for students to take risks & experiment without the fear of making mistakes

5^2 - 4^2 Promotes a cool high-tech environment for hands-on STEAM learning

$\sqrt{100}$ Partners with schools to provide STEAM curriculum & resources to better prepare kids for the future

Sign up for an after-school enrichment program, a weekly or single day camp or one of our membership programs:

- Game-based learning keeps your child engaged
- Hands-on experience with real-world applications
- Low student-to-instructor ratio of 5:1
- Peer-based learning from role model instructors in our fun, high-tech environment
- Parents receive personal progress emails after every class from their child's instructor
- Mastery Progression for academic advancement
- Develop critical thinking & problem-solving skills
- Learn with friends!

Academic Enrichment & Support Science, Reading & Math

Zaniac offers a variety of after-school academic enrichment and support programs to help your child be successful at school. Build confidence and real academic advantage with Zaniac.

Zane Math (K-8)

At Zaniac, we believe that all children can learn and become excited about math. Forget drills and repetition. Zane Math engages your child in creative, conceptual problem solving in a fun environment. Zane Math is our proprietary world-class curriculum that's composed of 15 levels to cover the fundamentals of kindergarten through 8th grade math and is aligned with Singapore Math. The backbone of Zane Math is its custom software that allows Zaniac to create a program to best fit each child's needs. Zane Math takes a measured approach from start to finish, allowing parents to log in and view their student's results throughout the course.

- Students begin with an assessment identifying concepts that they already know and concepts where they can improve.
- Students receive a customized, 100-page curriculum from our 12,000-problem database.
- Each concept ends with a Milestone demonstrating concept mastery and showing weekly improvement.
- Students end each level with an achievement test demonstrating progress and improvement.

Edison Club (K-8)

Zaniac's Edison Club membership program is the perfect choice for parents who want to ensure Zaniac is part of their child's educational development and are looking for an enriching after-school solution. Edison Club is designed to make a real difference in your child's performance at school and confidence level, while giving you a flexible and cost-effective after-school solution. Edison Club Membership includes:

- Zaniac's comprehensive Zane Prep Tutoring, including Zane Math & Reading.
- Zaniac's STEAM Programs.
- Homework Help and an engaging mix of science activities and experiments.
- The ability for your child to stay at Zaniac after school.
- Member benefits such as: Parents' Night Out, Buddy Passes, and more.

Led by our talented and fun instructors, Zane Prep begins with an assessment of your child's math and reading skills to identify areas for improvement. We monitor your child's homework assignments and ensure their work is completed. Choose from any of our science, technology, engineering, art and math (STEAM) Programs on an ongoing basis. After each session, you will receive an email with a Daily Report Card that includes an evaluation of your child's math and reading skills, a progress update with our

STEAM Programs, as well as school homework completed. Edison Club is the smart choice for your child's after-school needs!

Early Learners (Pre-K-K)

Fill the gap in your current half-day Kindergarten program with a supplemental half-day of STEAM enrichment like only Zaniac can provide! Zaniac Early Learners sessions can be scheduled in the morning or afternoon opposite your child's current half-day kindergarten schedule.

Homework Center (K-8)

At Zaniac, we understand what a difference a little bit of extra attention can make in a child's confidence in school. That's why our trained instructors are available each day after school and on Saturdays to help your child with homework. Zaniac offers a fun environment for students to get extra attention and help on the topics they are studying in school. In turn, your child gains confidence in his or her ability to succeed in the classroom. Help available in all standard subjects.

Chess (K-8)

Chess Instruction helps your child develop strategic thinking skills which are critical to success. Studies have long shown the benefits of playing chess include developing higher order thinking skills, enhancing creativity, and improving memory, all giving your child a leg up at school. Chess is also designed to be self-motivating and teach consequences to develop individual responsibility.

- Zaniac's chess program was developed by our founder, Paul Zane Pilzer, who represented the United States in chess against Russia at 14 years old.
- Learn problem solving and abstract reasoning.
- Beginner, intermediate and advanced levels available.

Touch Typing (2-8)

Children today must able to type effectively to succeed in doing schoolwork, taking tests, and engaging in almost every aspect of today's technology driven world. Zaniac's Touch Typing classes help your child increase typing proficiency so she or he can more easily achieve success in school. Fun typing games increase proficiency and develop self-confidence.

Computer Programming

Students work with Zaniac instructors to learn coding and real-world skills that software developers use every day. Go from true beginner to writing custom programs and games in Java, all while having a blast along the way. Coding has never been so cool.

Beginners:

Intro to Scratch (2-8)

Students learn programming skills while creating their own games and music videos. Zaniac's instructors introduce basic programming concepts like sequences, loops, iterative development, and debugging using Scratch, a block based program developed at MIT.

Game Design with Scratch (2-8)

Students will design basic games and dive deeper into the concepts of interactive software design. Learn variables, 'if, else' statements, conditionals, operators, and more.
Intro to Scratch is a prerequisite.

App Creation (3-8)

Students learn how to create new customized apps using App Inventor 2, a block-based, visual programming approach designed by MIT. They will explore event handlers, timers and database management.
Intro to Scratch is a prerequisite.

Intermediate:

Web Design (3-8)

Students explore layout strategies, color theory, responsive web design, usability and visual weight and use visual style guidelines, JavaScript, HTML5, CSS3 and Weebly to create their own custom website.
Intro to Scratch, Game Design with Scratch are a prerequisite.

Intro to Python (4-8)

Students are introduced to syntax-based programming. Students will learn lists, strings, conditions, how to draw animations and make the foundation of a platform game.
Intro to Scratch and Game Design with Scratch are a prerequisite.

Game Modding Minecraft™

Intro to Mods (4-8)

Students learn to customize Minecraft and work with developer tools including JDK, Eclipse, Terminal, and Gimp to create custom items, blocks, and new materials by writing their own code in Java. Students learn to install resource packs and pre-existing mods, and interpret the elements of existing mods to define qualities of their own.
Minecraft Exploration and Intro to Scratch are a prerequisite.

Advanced:

Intro to Java (4-8)

Students hone their programming skills by exploring Java programming. They will learn the basics of Java, a powerful 'write once, run everywhere' language and create a text-based adventure game while learning the basics of Java syntax.
Intro to Scratch, Game Design with Scratch and Web Design are a prerequisite.

Game Modding Minecraft

Advanced Mods (4-8)

Students dive deeper into the Minecraft Coder Pack for more advanced approaches to create custom inventory tabs, biomes, crops, and unique armor. They can build on what they learned in Intro to Minecraft Mods to create a brand new mod.
Intro to Minecraft Mods is a prerequisite.

Game Based Learning

At Zaniac, we use Minecraft and Kerbal Space Program (KSP) as a tool to teach real world math, science and technology skills. Minecraft and Kerbal Space Program reinforce math concepts and introduce students to physical and life sciences. Kids learn with their peers in a fun team format while developing critical reasoning skills.

Minecraft Exploration (K-8)

Students learn Cartesian coordinates and use them to navigate while working together with friends to accomplish group missions. They will explore real science and engineering concepts like biomes and gravity while playing the game they love.

Minecraft Galaxy (1-8)

Students learn about Earth's oceans and undersea life with the Oceancraft mod, and explore space with the Galacticraft mod. They can design and build rockets that travel to the moon, International Space Station, and even Mars where they will attempt to terraform the planet.
GBL Minecraft Exploration or equivalent Minecraft experience is a prerequisite.

Minecraft Architectural Design (1-8)

Students learn the basics of urban planning and building design. They can explore real-world architectural landmarks through Google Maps & Street View, then take that knowledge and apply it to designing a cityscape using Minecraft and Tinkercad.
GBL Minecraft Exploration or equivalent Minecraft experience is a prerequisite.

Minecraft Physics (4-8)

Students get introduced to the world of physics and explore Newton's Laws, mechanics, and thermodynamics and will begin working with advanced concepts like fluid physics and electromagnetics, all in the Minecraft universe.
GBL Minecraft Exploration or equivalent Minecraft experience is a prerequisite.

Kerbal Space Program (4-8)

Students get to explore a whole new universe by creating and managing their own space program. They can explore aerospace engineering and orbital mechanics by designing, testing, and launching airplanes and rockets to complete a series of missions. Through this course students develop critical-thinking and problem-solving skills, learn through experimentation, and unleash their creativity with an iterative design approach.

Engineering

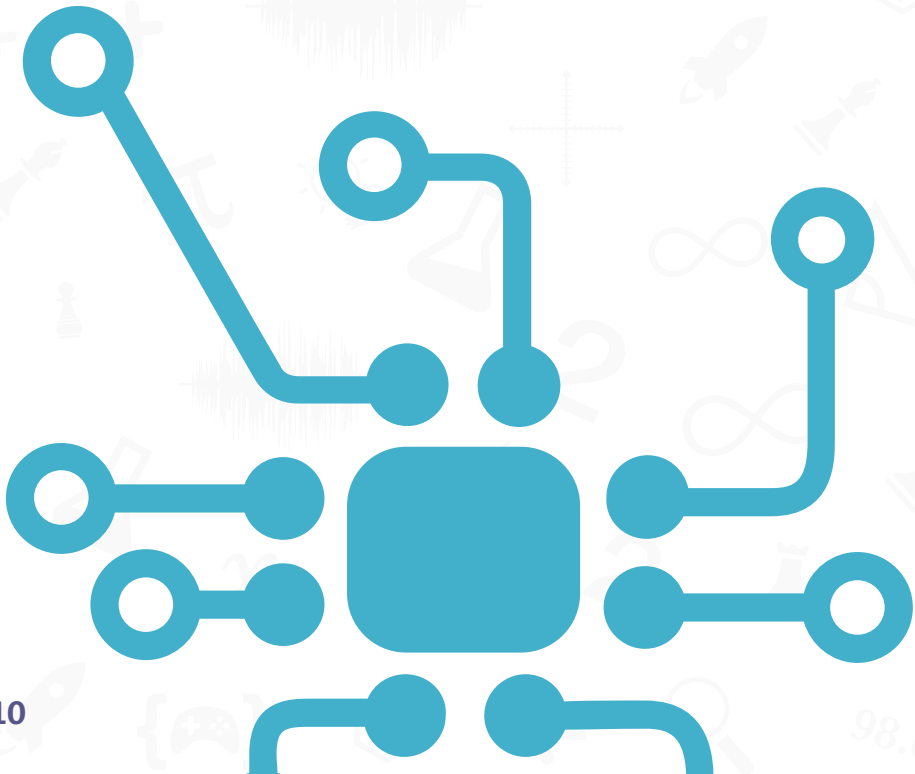
Zaniac's engineering program provides a powerful way to inspire students' interest, engagement, and understanding in engineering through hands-on exploration and innovation. These courses focus on the design elements of high-quality, engineering-rich tinkering activities, and use a unique approach that helps students learn.

Robotics: LEGO Simple Machines (K-5)

Simple Machines is perfect for younger learners who are just getting started with LEGO. Students get an introduction to levers, inclined planes, pulleys, screws, and complete challenges through building motorized mechanisms in teams.

Robotics: Intro to LEGO Robotics (1-8)

Students learn the basics of robotics, the scientific method, forces, and design through exploring scientific and engineering concepts. They will learn to build and program robotic solutions to defined specifications and get introduced to a variety of sensors and motors.
LEGO Simple Machines is a prerequisite.



Robotics: Environmental Science (2-8)

Students dive into the study of environmental science concepts such as renewable and non-renewable resources, carbon footprints, recycling, energy efficiency, and water conservation while they gain a deeper understanding of robotics.
Intro to LEGO Robotics is a prerequisite.

Tinkering: Intro to Circuits (K-5)

Intro to Circuits uses littleBits®, the easiest way to prototype electronics, to teach basic inputs, outputs, analogs, electricity, and more. Students build projects ranging from synthesizers to flashlights, exploring the world through the lens of easy-to-build magnetic circuits.

Tinkering: Intro to Microcontrollers (5-8)

Students learn programming logic through hands-on hardware projects and work with sensors to explore the science of light and sound, and build creatively with motors, wires, and real circuit boards to create projects like color-mixing lamps.
Intro to Scratch and Intro to Circuits are a prerequisite.

Art & Design

Art & Design

Our Design classes place an emphasis on the art in STEAM. Students will be immersed in the engineering and design process through hands-on, engaging projects like 3D Printing, music engineering, and fashion design. Zaniac instructors guide students as they create their own well-designed items en route to assembling an innovative portfolio while using our cutting edge technology that better helps them prepare for their future.

Intro to GarageBand® (3-8)

Starting with the basics of musical notation and form, students work through looping, editing, sound manipulation, and capturing vocals and MIDI instrumentation to create their own music.

Fashion Design (3-8)

Students create one-of-a-kind looks using the open-source vector graphics software Inkscape. Assemble your own custom garment designs through assembling mood boards, drawing vectors, arranging nodes, and layering color palettes.

3D Printing (3-8)

Students will be immersed in the engineering and design process and improve spatial intelligence through conceptualizing three-dimensional models then printing their own unique and exciting ideas and turning them into a reality.

3D Game Design (4-8)

Students learn the process of Character Design, Environment Creation and get hands-on experience with C# programming. In this three-part course, students use Unity, Gimp, Blender3D to create a 3D game.

3D Character Design

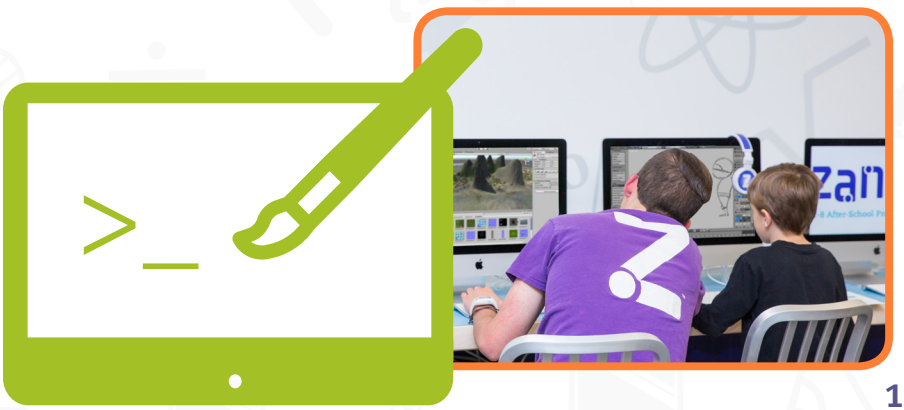
Students create 3D character models using the modeling software Blender and learn game design concepts like rule implementation, game flow and paper prototyping.
Game Design with Scratch is a prerequisite.

3D Environment & Design

Students use the Unity game engine to map 3D environments and apply attributes, then design textures in Gimp to overlay on their world. They will learn design concepts like genre, random generation, character/world interaction and sound design.
Game Design with Scratch is a prerequisite.

C# Fundamentals

Students bring characters and environments to life using C#, a real-world oriented programming language, and learn concepts like classes methods, and strings to create C# scripts.
Character Design and Environment Design are a prerequisite.



Camps (K-8)

School break camps are the perfect combination of learning and fun, featuring our many engaging programs that nurture your child's love of math and technology. Zaniac is open most days your child's school is on break, including single day camps during no school days.

- Camps available over winter, spring and summer recess/break, early release days all no school days and most holidays.
- Single-Day and Week-Long camps available
- Choose between half-day (morning or afternoon) and full-day camps.
    - Half-Day 9:00am - 12:00pm or 1:00pm - 4:00pm
    - Full-Day 9:00am – 4:00pm

STEAM Quest (K-8)

Circuit building, egg drops, balloon car races, and battle bots are all just a day's work during STEAM Quest camps. Every STEAM Quest week brings a new adventure where students can dive into our deep library of hands-on STEAM activities and projects or explore Science, Technology, Engineering, Art, and Math while getting a taste of every program Zaniac offers!

Events (Pre-K-8)

Book your next event at Zaniac! Let Zaniac inspire your student to become a lifelong learner by using our highly qualified instructors to host your event.

Birthday Parties

Birthday Celebrations at Zaniac entertain kids and are STEAM focused. Create a biome, program a robot, strategize in chess or build a video game with Scratch. Build STEAM skills as you blow out candles. Contact us for more details about our Birthday Packages.

Private Events

Boost your child's interest in STEAM by letting Zaniac host a private event such as "Bring Your Child to Work Day," or exclusive STEAM Nights for your school or school fairs.

Parents Night Out

Enjoy a night off and drop your kids at Zaniac to build, create and play while learning science, math and engineering concepts.

STEAM Socials

STEAM Socials at Zaniac are an exciting way to entertain kids ages 3-12 through educational play. Children will work and play together with Zaniac's engaging instructors on unique STEAM programs. Kids can create a biome in Minecraft, program a robot, build a website, strategize in chess, create new looks with fashion design or build a video game with Scratch.

**Not all programs are offered in all campuses. Contact your local campus for more information.*


zaniac
K-8 STEAM After-School Programs & Camps