



# Spring 2024 Schedule

## Jr. Lego Robotics

Ages: 5 to 8 years

Schedule: Feb 7<sup>th</sup> – May 15<sup>th</sup> : **Wednesdays** 5:30pm to 7pm

Classes @ IMA school

Final Competition on May 21<sup>st</sup> (Mall quad)

Cost: \$150

## Lego Club

Ages: 8 years and up

Schedule: *Everyday 8am to 12pm*

- June 17th - 21<sup>st</sup>
- July 8th – 12<sup>th</sup>
- August 5th - 9th

Classes @ IMA school

Competition: Friday of each session week (12pm to 2pm @ Mall Quad)

Cost: \$150

## Girls Who Code (GWC)

Ages: 11 years and up

Schedule: Feb 7<sup>th</sup> – May 15<sup>th</sup> : **Wednesdays** 5:30pm to 7pm

Classes @ IMA school

Final Competition on May 21<sup>st</sup> (Mall quad)

Cost: \$25/month

## Game Development Workshop

Ages: High School

Schedule: TBD

Competition: TBD

Cost: \$25/month or \$220

## IoT

Ages: 10 years and up

Schedule: TBD

Classes @ Friendship House

Cost: TBD

## 3D printing

Ages: 8 years and up

Schedule: TBD

Classes @ IMA school

Cost: TBD

## Mental Math

Ages: 5 to 8 years

Schedule: TBD

Classes @ IMA school

**For Additional Details Please Contact:**

Illinois Math Academy, Phone: (309) 692 – 8888, Email: [illinoismath@gmail.com](mailto:illinoismath@gmail.com)

<https://www.facebook.com/IMAillinoismathacademy/>

2200 War memorial drive, Peoria, IL-61613

Non-profit Organization helping Central Illinois Children

## Description

Illinois Math Academy's vision is to offer programs to encourage children in the Peoria area to explore all the possibilities in the STEM field. We offer the following programs:

### Mental Math:

- The Mental Math program is a brain development program that stimulates the brain by teaching children to perform mental calculations quickly and accurately without the use of any electronic tools. Our students, typically aged 5 to 13, are guided to develop and use their mental faculties more fully.
- This program stimulates both the right and left sides of the brain. While the left side is used for logical calculation, the right side is working to visualize the calculation. Therefore, the brain is trained to become more flexible and effective.
- Mental Math combines the ancient teaching tool – the Abacus – with modern instructional expertise to stimulate child development and whole brain development while promoting learning, especially math, as fun and exciting.
- The training will also lead to the development of the right brain as learners would be using their right brain to create an image memory while performing the calculations mentally. .
- This program fosters active learning and activates key cognitive functions such as memory, attention, perception, symbolic learning, and reasoning.

### Lego Robotics

- Design and build a challenge-related model using LEGO components.
- Create a Show-Me poster and practice presentation skills.
- Discover real-world math and science.
- Begin developing teamwork skills.
- Engage in team activities guided by Jr. FLL Core Values.
- Strategize, design, build, program.
- Apply real-world math and science concepts.
- Develop life skills including critical thinking, time management, collaboration, and communication while becoming more self-confident.
- Learn programming the Robot and compete in Lego tournaments.
- Engage in team activities guided by FLL Core Values.



### Girls Who Code Program (6<sup>th</sup> – 12<sup>th</sup> grade):

Together with leading educators, engineers, and entrepreneurs, Girls Who Code has developed a new model for computer science education. It pairs intensive instruction in robotics, web design, and mobile development with high-touch mentorship and exposure and is led by the industry's top female engineers, IT Professionals, and entrepreneurs.

### IoT (Internet of Things) (6<sup>th</sup> – 12<sup>th</sup> grade):

This is the program which offers new technologies and exposes children on what is happening in IoT, cloud computing etc. Children will have an opportunity to work with Raspberry Pi, Arduino board and various types of building blocks of IoT devices. They will have an opportunity to learn latest language and simple web-design etc.

### Game Development Workshop (9<sup>th</sup> – 12<sup>th</sup> grade):

Do you love games? This is the entrepreneurial program for students who are interested in pursuing their tech dreams and may start their own business down the road. Learn how to make your own videogames in this class. Working in groups, students design and build their own video games. Mentors from Bradley University's Game Design program (ranked #9 in the world!) teach the secrets of game development help guide the projects from start to finish.

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**Non-profit Organization helping Central Illinois Children**

Additional Information: Jr. Lego Lesson plans are online link here: (Grades: 1-5)

[STEAM Lesson Plans for All Ages | LEGO® Education - \(https://education.lego.com/en-us/lessons/?products=SPIKE%E2%84%A2+Essential\)](https://education.lego.com/en-us/lessons/?products=SPIKE%E2%84%A2+Essential)

## Unit Plans

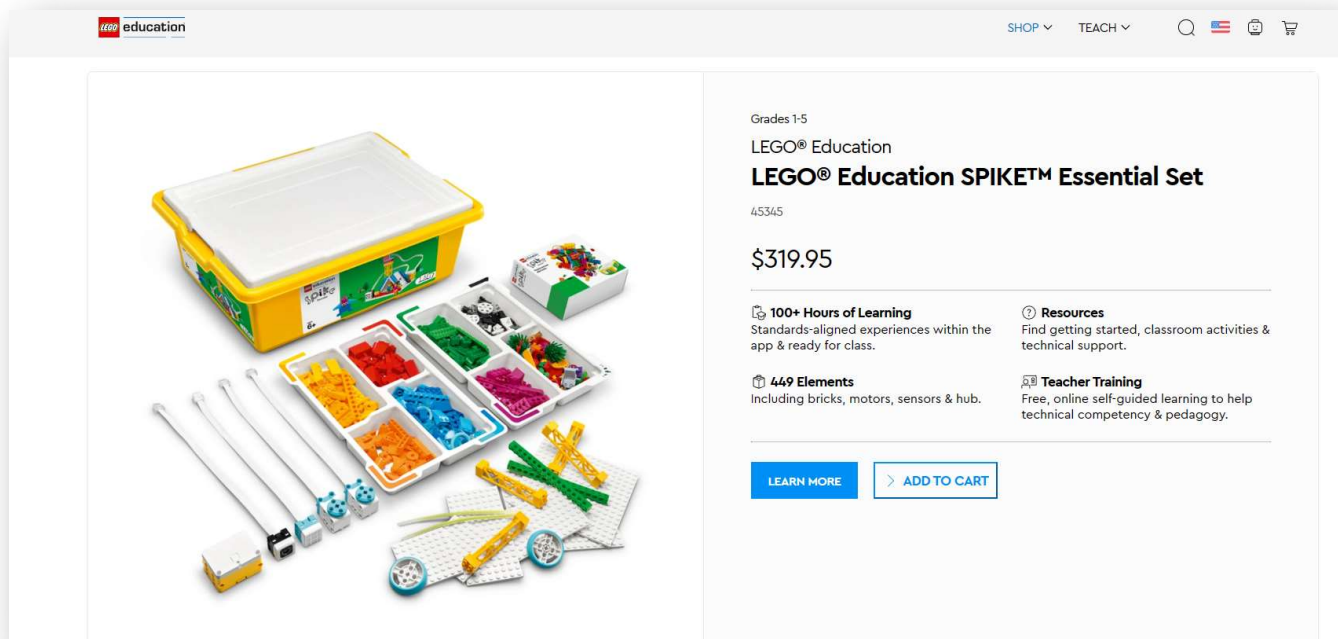
LEGO® Education SPIKE™ Essential comes with 5 different unit plans, each with a unique learning promise, summarizing what your students will learn over the course of the unit.

- ✚ **Great Adventures:** Creating Interactive Stories.
- ✚ **Amazing Amusement Park:** Engineering a Fun Day Out.
- ✚ **Happy Traveler:** Programming Your Way Around Town.
- ✚ **Crazy Carnival Games:** Playing with Energy Transfer and Collision.
- ✚ **Quirky Creations:** Engineering Cool School Hacks.
- ✚ **Essential Combined:** Combine LEGO® Education SPIKE™ Essential and LEGO® Education BricQ Motion Essential to challenge your students' STEAM knowledge and push their creativity to new heights!

Note:

Lego Jr. Program will require the following kits. Each set supports 2 students in the classroom. Propose 5 kits now funded by 2-1 CAT FOUNDATION Nov 27 – Dec 1

[SPIKE™ Essential Set 45345 | LEGO® Education](#)



LEGO education

SHOP ▾ TEACH ▾

Grades 1-5

LEGO® Education

### LEGO® Education SPIKE™ Essential Set

45345

\$319.95

- 100+ Hours of Learning**  
Standards-aligned experiences within the app & ready for class.
- Resources**  
Find getting started, classroom activities & technical support.
- 449 Elements**  
Including bricks, motors, sensors & hub.
- Teacher Training**  
Free, online self-guided learning to help technical competency & pedagogy.

LEARN MORE > ADD TO CART

Unit Plan (8 Lessons)

Hybrid



## Amazing Amusement Park

SPIKE™ Essential

Come enjoy the amusement park with Leo, Maria, Sofie, and Daniel. Design, create, and improve wild and crazy rides for the four minifigures to enjoy. What can you build?

STEAM, Engineering

Grades 1-2



Unit Plan (7 Lessons)



## Happy Traveler

SPIKE™ Essential

Hello! Let's go! Daniel, Sofie, Maria, and Leo are off on an adventure in a new town. Create, program, and test new vehicles to help the minifigures explore!

STEAM, Computer Science

Grades 3-5



CAT Foundation Help

[CAT FOUNDATION Giving 2:1 Match \(http://tinyurl.com/4nvkanjj\)](http://tinyurl.com/4nvkanjj)

Propose 5 kits now funded by 2-1 CAT FOUNDATION Nov 27 – Dec 1.

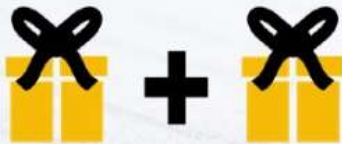
\$500 sent to IMA by Gene Schneider / CAT provides \$1000.

Caterpillar Foundation

**GIVING TUESDAY**

**2:1 MATCH**

OPEN NOV 27 – DEC 1



**HAVE YOUR DONATIONS MATCHED 2:1 | LAUNCHING NOVEMBER 27**

Current Caterpillar Cares Program Participants:

In support of [Giving Tuesday](#), the Caterpillar Foundation will provide a limited-time 2:1 match through our [Caterpillar Foundation Matching Gifts Program](#) for global employee and U.S. retiree gifts made starting **November 27 through December 1, 2023** (or once the 2:1 match total reaches \$2 million USD - see details below).