



# Fund Grant Application

Please read the “Grant Guidelines” at <http://ieeechicago.org/science-kit-grants/> before completing this form.

Project

Title:

**STEM to Go: Circulating Science  
Kits**

Library Name and

Address:

**Oak Lawn Public  
Library 9427 S.  
Raymond Ave. Oak  
Lawn, IL 60453**

Contact information for all interaction with the IEEE-Chicago Section Fund Advisory Committee. *This person will receive all email and correspondence from the IEEE-Chicago Section Fund and will be responsible for passing information to the project team.*

**Mary Donovan, Youth Services Outreach  
Librarian [mdonovanys@olpl.org](mailto:mdonovanys@olpl.org) 708.422.4990  
ext 412**

Contact information for the person responsible for managing the project finances. *This person will receive the grant payments*

**Kathy Szott, Business and Personnel  
Manager [kszott@olpl.org](mailto:kszott@olpl.org) 708.422.4990  
ext 310**

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What is the proposed duration of the project in months? *It is expected that you will start upon the receipt of your initial grant check and that the duration will not exceed 12 months.*

**The proposed duration of the project is 12 months.**

Describe your existing science kit collection if you have one. (*Up to 100 words*)

**We do not currently have a science kit collection.**

Do you currently circulate science kits?  YES  NO

Describe the community you serve including demographics, median income, unemployment rate, etc. (*Up to 200 words*)

**Oak Lawn is a Chicago suburb with a population of 56,690. Its median household income is \$56,185. 10.8% of its residents live below poverty level. In July 2017, its unemployment rate was 4.8%. 89.9% of Oak Lawn residents are high school graduates, 26.0% are college graduates, and 6.1% are attending college. Close to 15% of residents are foreign-born. English is spoken by 72.0% of residents, Spanish by 12.5%, Arabic by 6.2% and Polish by 4.2%.**

**Oak Lawn is served by two elementary school districts, Oak Lawn-Hometown District 123 and Ridgeland District 122, and by Oak Lawn Community High School. In addition to the two middle schools and ten elementary schools in the districts, Oak Lawn Public Library also serves seven parochial schools. In District 123, 45% of the students are low-income and 13% are English learners. In District 122, 69% of the students are low-income and 31% are English learners. At OLCCHS, 39% are low income and 5% are English learners.**

**The library strives to meet the needs of Oak Lawn's newer residents, who are learning our language and culture, as well as the needs of our longtime families.**

**(Data from U.S. Census Bureau and Illinois Report Card**

**2016-2017)**

words)

**Many of our young patrons do not have smartphones or computers. We hope that checking out STEM kits will help bridge the gap between their families and those who live in wealthier communities with fuller access to technology.**

**Children enjoy our STEM programs. We recently received a gift to buy tech items, with the stipulation that they are to be used only for library programming. Circulating STEM kits will enable children to extend our programs with further explorations at home.**

**Local teachers often lack science equipment. We hope they will be able to use our STEM kits in their classrooms.**

*Provide a summary of your project. (Up to 250 words) This summary should explain how the project fits into the grant guidelines of the IEEE-Chicago Fund, and what you plan to achieve through the successful completion of this project.*

**Since our Youth Services department serves children from birth through eighth grade, we are hoping to build 14 STEM kits focused on computer science, engineering and physics for children ages 3 – 14. Coding materials include Cubetto, Code & Go Robot Mouse kits and Ozobots. Architecture kits include Magna-tiles, Keva planks, and Knex Bridge kits. Electronics kits include Snap Circuits and a Little Bits Star Wars Inventor kit. Physics kits include a Force Flyers DIY Building Block Drone and kits on simple machines.**

**We also hope to include iPad Minis in the Ozobot and Little Bits Star Wars kits, since those robots are app-enabled via Bluetooth. An internet connection will allow children to learn coding with the robots.**

**Each kit will also include books and when available, DVDs relating to the subject, as well as a binder with additional resources and activities.**

**The kits will be catalogued and checked out for a three-week**

**period. They will be eligible for holds with an Oak Lawn Public Library card.**

Provide a summary of your project.  
(Continued)

**We will launch the kits at an open house for families and teachers, and promote them at the monthly STEAM programs we offer in conjunction with the Museum of Science and Industry; at our other children's programs; in our outreach at local schools; and in our newsletter, website and social media.**

**We hope this project will foster our young patrons' interest and skills in STEM topics by providing them, and their teachers, with hands-on tools and technology.**

Describe how you will measure your results. *(Up to 100 words)*

**Circulation data will tell us how well the kits circulate, which ones are most popular, and how well the additional resources listed in the kit binders circulate. Each kit will also include a survey with sections for children, parents and teachers. Desk staff will be able to question patrons directly, and our outreach librarian will ask teachers about their experiences with the kits as well. All of these forms of feedback will enable us to see what tweaks should be made to the kits, and what STEM topics should be covered when we build additional kits.**

Describe how you will assist other libraries in replicating your results. *(Up to 100 words)*

**Our Youth Services staff are active in many professional associations, including the Children's Librarians' Association of the South Suburbs (CLASS), LACONI, the RAILS Tinker group, and ILA. Staff will be happy to report to their colleagues about the results of the project through presentations to these organizations, as well as posts to relevant association blogs and RAILS groups' mailing lists. Staff is also willing to submit articles about the project to professional journals. In addition, the cataloging records for our**



**kits will be available to the 91 members of SWAN, our consortium.**

words)

**Since the kits will be part of the circulating collection, Youth Services will be able to carve out collection development funds from the relevant STEM collection areas to build additional kits and replace missing or damaged parts. We are starting with technology and engineering-oriented kits because these seem to be the STEM areas that arouse the most interest from our patrons and because these subjects seem to circulate well in the grant reports on the project. But we hope to be able to expand not only within these areas, but beyond them into biology, ecology, astronomy and mathematics.**

Name and Signature of Library  
Director:

**James D. Deiters Jr. Send your completed application and estimating budget to:** Michal Gawlik Grant Application Manager Science Kits for Public Libraries [michalg@ieee.org](mailto:michalg@ieee.org)



**Anticipate  
d Income**

**Estimated Expenses**

Cubetto Playset Co

Funding Source Name	Amount to be paid from other Sources	Amount to be Paid from Chicago Fund Amount to be Paid from Chicago Fund Amount to be Paid from Chicago Fund
IEEE Chicago Fund Grant Request (Maximum of \$2,000)		
Science Kit or Supporting Material Expense Description Science Kit or Supporting Material Expense Description		

Oak Lawn Public Library

My First Coding Bo  
(book), Quantity 2  
\$2

7

Baby Loves Coding! (book) \$9

Learning Resources Code & Go  
Robot Mouse Activity Set

\$3

7

Ozobot Evo 3-year

Kids Get Coding: Learning  
Program (book)

\$  
8

How to Code: A Step-by-Step  
Guide to Computer Programming  
(book)

\$1  
0

National Geographic Kids  
Everything Robotics  
Quantity 2

\$1  
8

The Robot Book: Building  
20 Electric Gizmos, Gadgets,  
Machines & Hacked

\$1  
4

iPad mini 4 \$400

iPad mini 4 3-year p

Armorex iPad mini 4

Magna-Tiles Clear C

\$7                      48-piece DX set                      5

How a House is Built (book) \$8

\$1

Look at That Building: A First  
Book of Structures (book)

2

Magnets Push, Magnets Pull (book) \$16

KEVA Structure 200

The Illustrated Atlas  
Architecture and Ma  
Monuments (book)

\$2

0



The Story of Buildings (book) \$16

Feats of Engineering  
Projects (book)

Skyscrapers: Investigate  
Feats of Engineering (book)

\$1  
0

\$1  
0

Knex Education Introduction  
to Structure: Bridges set

Knex Educ. Building  
to Simple Machines  
Levers/Pulleys

\$4  
0

\$3  
4

Bridges: Amazing  
Structures to Design, Build  
& Test (book)

Super Cool Science  
Experiments: Lever  
Pulleys (book)

\$1  
1

\$1  
4

Bridges &Tunnels: Investigate

Explore Simple Machines! (book) \$9

The Science of Disney  
Imagineering: Levers & Pulleys  
(DVD)

Knex Educ: Intro to  
Machines, Gears S

\$2  
0

\$3  
9



			Ramps & Wedges (
			\$
	Simple Machines: Forces in		8
	Action (book)		
	\$		
	9		
			Bill Nye the Science
			Simple Machines (D
	The Kids' Book of Simple	\$1	
	Machines: Cool Projects &	7	
	Activities (book)		
	\$1		
	5		Learning Resources
			Simple Machines A
		\$3	
		0	
	Knex Educ. Building Kit: Intro		
	to Simple Machines, Wheels,		
	Axles, Incined Planes		Simple Machines: V
\$3			Levers, and Pulleys
2			\$
			8
	Making Machines with		
	Wheels & Axles (books)		Simple Machines (F
	\$		Read-About Scienc
	8		\$
			5
	Making Machines with		
	Simple Machines (book) \$12		
		\$1	
		7	
	Snap Circuit Beginner		
	Electronic Discovery Kit		



Switch On, Switch Off (book) \$6

\$1

Snap Circuits Jr SC100  
Electronics Discovery Kit

8

Electronics for Kids (book),Quantity 2 \$34

Making a Circuit (book) \$7

3-year protection pl

Little Bits Star Wars Droid  
Inventor Kit

\$1

5

\$10  
0

Little Bits Star Wars Droid

iPad mini 4 \$400

iPad mini 4 3-year protection plan \$83

Armorex iPad mini 4 case \$17

How Circuits Work (book) \$25

Safety (DVD)

Cool Battery & Electricity  
Projects (book)

\$2

5

\$2  
2

Tell Me Why: How Things  
Work Electricity & Electric

Science of Disney  
Imagineering: Elect  
(DVD)

\$3  
0

Mighty Mars Rover (book) \$11

Force Flyers DIY Building Block Drone  
\$50

Civilian Drones (book) \$26

Flying Robots (book) \$12

Building Aircraft and  
Spacecraft: Aerospace

Engineers (book)  
\$2  
1

Latching storage bins, Quantity 14 \$63 \$63  
from other

Total of Estimated Expenses  
to be paid by the Chicago  
Fund \$621

\$1,94  
0

Total Funding

Total funding \$2,561 Total Estimated Project Expenses \$2,561