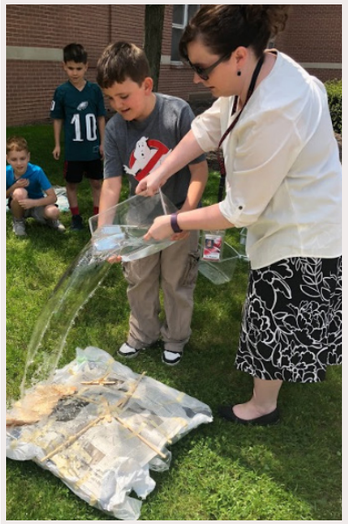
Testimonials

"When I created and wrote the curriculum for the Pre-Engineering program at Greater Johnson, EbD was my guide. I used the standards-based model to align our K-12 program with the Math and Science we were already teaching. EbD gave me a rigid flow to follow for alignment while allowing for flexibility to keep my art of teaching alive and exciting."

~Mark Mosorjak
(Grades 7-12 Technology & Engineering Teacher, Greater Johnstown School District)

"Since the content was hands-on and challenged the students' critical thinking and creativity skills, they were instantly hooked into the content they were learning and then were excited to see their learning results in the projects and assignments throughout the unit. All in all, the EbD program teaches the students real-world content in an engaging way, and I look forward to teaching the unit again this year!"

~Nicole Winger
(3rd Grade Teacher, Manheim Township School District)



"I loved our STEM unit. The test was easy because I really knew what I was talking about after I completed the STEM Challenge."

~Landisville Primary Student
(Hempfield School District)

"The lesson plans were teacher firendly and the plans aligned with multiple standards...I am thankful that my students had these experiences because they were developing skills that will help them for the rest of their lives."

~Jadi Redcay
(Landisville Primary, Hempfield School District)

Engineering byDesign™ is produced by the International Technology and Engineering Educators Association.

Engineering byDesign™

Contact Information

Dr. Lauren Beal
717-606-1600
lauren_beal@iu13.org

Stephanie Fyock
717-606-1809
stephanie_fyock@iu13.org

Learn more: iu13.org/ebd

STEM Science, Technology, Engineering & Math | iu13

1020 New Holland Avenue | Lancaster, PA 17601
717-606-1600 | www.iu13.org

Published 10/2019

Engineering byDesign™

STEM Curriculum for K-12

Produced in Partnership with International Technology and Engineering Educators Association

iu13

Engineering byDesign™

With Engineering byDesign™, students in Grades K-12 learn by doing through standards-based courses designed to encourage collaboration, boost creativity, increase technical literacy, and solve problems. Choose from the standard version or our online platform, Ebd Buzz™.

The Engineering byDesign™ K-12 Curriculum

CORE PROGRAM	K–2		EbD-TEEMS™	1-6 weeks
	3–6		EbD-TEEMS™ *I*^{3*} (6th Grade Capstone)	1-6 weeks
	6		*Exploring Technology*	18 weeks
	7		*Invention and Innovation*	18 weeks
	8		*Technological Systems*	18 weeks
	9		*Foundations of Technology*	36 weeks
	10–12	HS Choices	*Technology and Society*	36 weeks
	10–12	HS Choices	*Technological Design*	36 weeks
	11–12	HS Choices	*Advanced Design Applications* *	36 weeks
	11–12	HS Choices	*Advanced Technological Applications* *	36 weeks
	11–12	HS Choices	*Engineering Design* (Capstone)	36 weeks

The International Technology and Engineering Educators Association's (ITEEA) STEM±Center for Teaching and Learning™ has developed the only standards-based national model for Grades K-12 that develops technology and engineering literacy through a STEM context.

The model, Engineering byDesign™ (EbD), is based on the Common Core State Standards for Mathematics and English Language Arts, Next Generation Science Standards, and the Standards for Technological Literacy. Additionally, the K-12 Program has been aligned to the National Academy of Engineering's Grand Challenges for Engineering.

Using inquiry and design-based models, students engaged in the program learn concepts and principles through authentic, project-based teaching and learning. Through an integrative STEM context, EbD™ leverages all four disciplines of STEM, as well as English Language Arts, to help students understand the complexities of tomorrow.

Multiple Options to Meet Your Needs

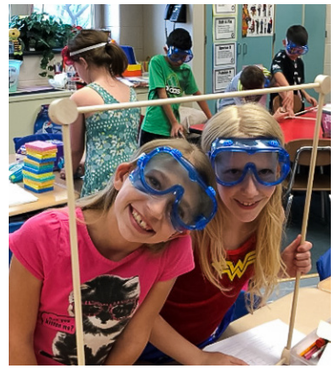
Standard Version Subscription Options

Our standard version gives you unlimited access to downloads of lesson plans in the full curriculum, plus training opportunities.

Pay Per Seat (Standard Version)

Trainings are conducted at The Conference and Training Center at IU13, located in Lancaster, PA.

$100/user (IU13 region)
$125/user (outside IU13 region)

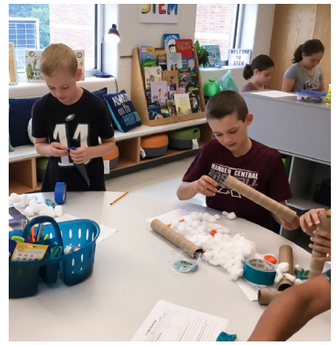


- Cost-effective for districts with a select number of users
- Free access for one year to standard edition for all courses K-12, for one school
- Off-site professional development
- Network with other districts

In-House (Standard Version)

Price includes one day of in-house training at your district.

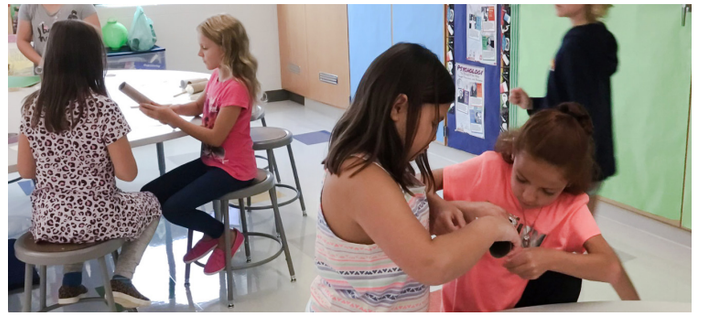
$950/district (IU13 region)
$1,050/district (outside IU13 region)



- Free access for one year to standard edition for all courses K-12
- Unlimited number of teachers can be trained
- Flat fee for entire K-12 curriculum
- Customized training tailored to your district
- Flexible training dates

Kits Available

All of the consumable materials used in the Engineering byDesign™ curriculum are common household items and can be purchased á la carte at low cost. Pre-made Kits are available for purchase through IU13.



Online Subscription Option

EbD Buzz™ network participation gives your school the full standard version of Engineering byDesign™; plus updates, a yearly membership to ITEEA, and even more tools to help your students' STEM education.

EbD Buzz™

Price includes professional development for lead teacher(s) and yearly online access to full curriculum.

$1,000/school, per year

- User-friendly platform
- Teachers get access to real-time student reports and test analytics reports
- Online access to pre- and post-assessments
- Assessments can be given to students asynchronously, saving teachers time in grading
- Ability to "flip" the classroom by changing visibility settings for students to view presentations, videos, assignments, etc.

STEM Science, Technology, Engineering & Math | iu13

1020 New Holland Avenue | Lancaster, PA 17601 | 717-606-1600 | www.iu13.org