

# **EIE ENGINEERING AND COMPUTER SCIENCE ESSENTIALS**

# **PROGRAM OVERVIEW**

EiE<sup>®</sup> is the curriculum division of the Museum of Science, Boston. Our mission is to create a generation of future-ready, problem solvers through supplemental engineering and computer science curricula with hands-on, open-ended design challenges for students, and transformative professional development for educators. Engineering and Computer Science Essentials<sup>™</sup> is EiE's newest elementary STEM program. It consists of five engineering units and five computer science units that are grade-level specific and can be used as stand-alone subjects or paired to form an integrated program. Each unit consists of four lessons and 8–10 hours of instructional time. The curriculum combines engineering and computer science learning to promote curiosity, discovery, and STEM literacy. Learning to think like engineers, students complete hands-on design challenges that help them experience real-world engineering, science, and computer science practices.

## **TARGET GRADES**

Engineering and Computer Science Essentials is designed for learners in grades 1–5.

## A UNIQUE OR SPECIAL FOCUS OF THE PROGRAM

Engineering and Computer Science Essentials brings together science, technology, math, engineering, and computer science practices and learning to build problem-solving skills and resilience in STEM.

#### **THE PROGRAM'S IMPACT ON STUDENTS**

Engineering and Computer Science Essentials inspires ALL students to see themselves as problem-solvers in STEM by fostering collaboration, persistence, communication, decision-making, and problem-solving skills.

#### SPECIFIC SKILLS STUDENTS WILL LEARN

*Collaboration; Persistence; Problem-solving; Math & Science; Systems thinking; Communication; Innovation; and Investigative.* 

#### **RESOURCES PROVIDED TO EDUCATORS**

Engineering and Computer Science Essentials, educators receive everything they need to implement each unit, including print educator guide; digital educator resources; interactive digital storybook; background information; rubrics; worksheets; answer keys; visuals; sample solutions; unit summary charts, implementation tips, cross-curricular connection callouts; vocabulary lists; family letters; step-by-step material setup; lesson objectives; standards alignments; and classroom materials.

**WEBSITE** https://eiestore.com/computer-science/integrated-stem.html

#### **CONTACT INFORMATION**

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