

The Engineering Society of Detroit's Boys in Engineering Academy (BEA) program is a transformative space that empowers primarily boys of color, historically marginalized in STEM fields, to live their best lives. BEA is unique as it focuses on the whole person by integrating STEM learning with a student-centered, hands-on, and project-based approach. BEA scholars are provided access to powerful STEM learning experiences that challenge them to think deeply and critically. As STEM learners, they are empowered to use STEM as a tool for personal and social change.

ESD will select up to 30 new applications for rising sixth grade middle school boys to participate in this year-long learning program. BEA continues each year, through 12th grade, building on concepts learned in previous BEA courses to create a strong engineering foundation.

The summer program engages students over a four-week period, Monday-Friday. The academic-year program meets two Saturdays a month October through May for three-hour sessions focusing primarily on material retention and comprehension.

During the first year of the program, students will receive education in these five fields:

- Mathematics (pre-algebra)
- Computer Science
(hands-on programming projects)
- Mechanical Engineering/Physics
- Drone Technology
- English/Language Arts

Students in the BEA program have access to college engineering students that can act as mentors and tutors to help with their work. The BEA program provides math and science enrichment, engineering and computer science concepts, English/Language Arts comprehension, hands-on project-based STEM activities, mentoring, field trips to industry, and engineering career exploration.

SPONSORS



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The Engineering Society of Detroit
20700 Civic Center Drive, Suite 450
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esd.org

Boys in Engineering Academy

2024-2025



THE ENGINEERING SOCIETY OF DETROIT®
FOUNDED IN 1895



BEA FEATURES:

- Education about what engineers do.
- Instructors who are male engineering students and university professors.
- Workshops in STEM.
- Hands-on experience designing engineering projects.
- Field trips to Engineering Facilities and other STEM-related places.
- Courses held on university campuses.
- Year 2 and older students stay residentially at university campuses during the summer program.



WHO'S ELIGIBLE?

Current 5th grade male students who are interested in STEM and passionate learners.

WHAT IS THE COST?

The annual cost is \$300 (which is due at the time of application). If not accepted, fees will be promptly refunded.

HOW TO APPLY?

Applications are at esd.org/bea and will be accepted through May 31, 2024 .

WHEN WILL APPLICANTS BE NOTIFIED?

We will notify applicants of their acceptance or wait-list status after June 3, 2024. We will not be able to respond to status requests before this date. Please provide a frequently checked email or cell phone (text) number on the application.



DATES AND TIMES

Registration Deadline
May 31, 2024

Summer Program
July 8 - August 2, 2024
Monday-Friday, 9 a.m.-4 p.m.

Academic Year Program
October 2024 - May 2025
16 Saturdays, 9:00 a.m.-12:00 p.m.

FOR MORE INFORMATION

Visit esd.org/bea



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