

SUMMER SPRINGBOARD
Look Inward. Go Upward.

Electrical Engineering

New student admissions for Summer 2027 are open.

Middle School Course

This is a one-week program where you'll focus on one course for the entire duration..

Program Highlights

- Build and test circuits, sensors, and microcontroller-based systems.
- Conduct experiments and analyze data to understand real-world energy and technology applications.
- Explore robotics technologies connected to biomedicine and artificial intelligence.
- Strengthen creativity, problem-solving and leadership through collaborative projects.
- Gain insights from engineering professionals through expert panels and field experiences.

2027 Dates

Georgetown ($2,998)

- Session 1: July 4 -July 9
- Session 2: July 11 - July 16

Academic Program Overview

In this immersive course, students get a head start in the technologies shaping the future. The program combines electrical engineering, mechanical principles, and the fundamentals of circuits, sensors, and microcontrollers through hands-on experiments, creative projects, and inspiring field trips. Designed for curious learners of all backgrounds, no prior experience is required—this course turns abstract STEM concepts into real, buildable devices.

Students will explore how electricity powers the world around us, learn to use professional engineering tools like multimeters and Arduinos, and work in teams to design and test interactive electronic systems. From lighting LEDs to programming sensors, each day provides opportunities to build, experiment, and create.

Excursions

Students will have an exciting opportunity to visit the Smithsonian and a cutting-edge Robotics Laboratory, exploring real-world engineering innovations from early aviation electronics to modern spacecraft. They will also experience local engineering and technology sites across Washington, D.C., connecting classroom learning to the innovations shaping the future. Back on campus, students apply their knowledge in a hands-on capstone project that they showcase on the final day.

Instructor

Georgetown - Ekundayo Shittu, PhD

Ekundayo Shittu, Ph.D. is a Professor in George Washington University's Department of Engineering Management and Systems Engineering and Director of the Systems Modeling Laboratory for Economic Decisions (SysMoLED). His research explores technology investments and sustainability using advanced modeling and data analysis. He co-edited Renewable Energy: International Perspectives on Sustainability, holds two patents in biomedical asset maintenance, and serves as Assistant Editor for Applied Energy. Dr. Shittu is a KEEN Fellow and has led STEM-focused summer workshops to inspire the next generation of innovators.

Course Structure

There are five 3-hour class sessions over the one-week course. During the week, students have class from 9am-12pm, Monday - Friday (program check-out is 2:30 p.m. on Friday). Wednesday afternoon will be dedicated to additional academic time with possible excursions and/or guest speakers.

The Middle School programs operate separately from Summer Springboard high school programs with separate staff, accommodations, classes, and a more structured environment. For students completing grades 6-8.

Tuition Information:

Apply by November 30 to lock in the lowest prices of the year. Tuition increases on December 1

Residential Students:

- **Includes:** all meals, lodging, excursions, academic course and weekend excursions
- **Excludes**: optional airport pickup and drop off service (available for an additional fee)
- **Price**: See prices under 2027 dates.

Commuter Students:

- **Includes:** lunch, academic course, excursions, programming from 9am to 5pm, Monday-Friday
- **Excludes:** lodging, breakfast, dinner and weekend excursions
  - Weekend excursions can be added on for $125 per day
- **Price**: $1,598

Typical Schedule

8AM	Breakfast
9AM	Academic Course / Commuter Student Arrival
12PM	Lunch
1:30PM	Academics in Action or Recreational Activity
3:30PM	Academic Skills Lab
5PM	Free-Time
5-6PM	Commuter Students Depart
6PM	Dinner
7PM	Evening Activity
8:30PM	Back in the Dorm
9:30PM	Mentor Check-In

Supplements:

- Application fee: Starting at $99 (mandatory, non-refundable)
- Tuition Protection Plan: Allows for cancellation for any reason up until the day of the program. Click here for more info.

More info on Airport Transfer

More info on Unaccompanied Minor Service

Apply Now!

Summer Springboard programs are not run by our campus partners (with the exception of Cal Poly, University of Washington Foster School of Business, and NYSID which are run in partnership with SSB). Universities and their affiliated departments and partners do not control and are not responsible or liable in any manner for any part of the Summer Springboard program.