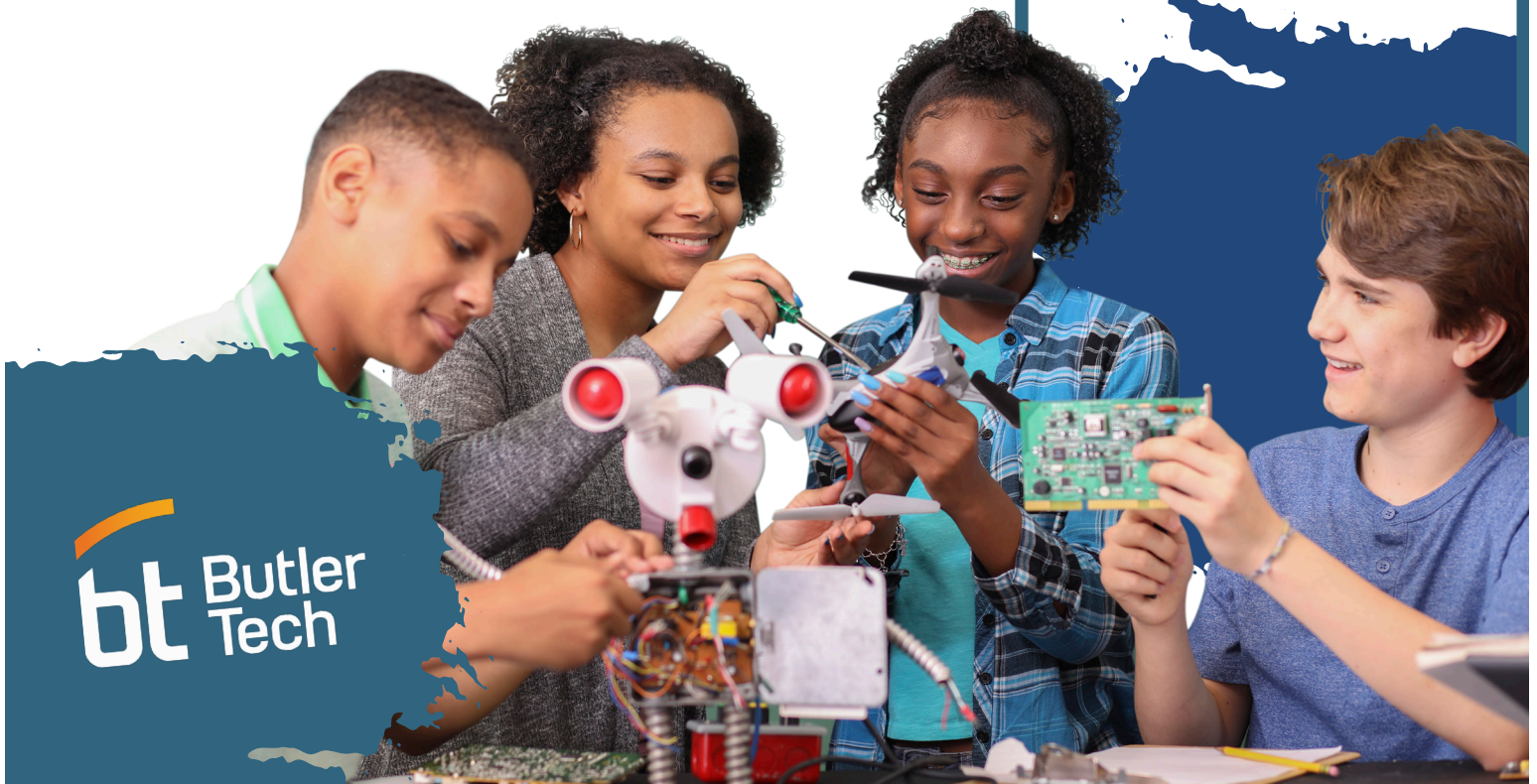# *Discover*
# BUTLER TECH AT EDGEWOOD MIDDLE SCHOOL

## Program Overview

**Middle school is a time of exploration, a time when students are figuring out what they're passionate about and how that relates to who they'll become tomorrow. Butler Tech, in collaboration with Edgewood Middle School, connects students to those passions in seventh and eighth grade with the introduction of the Project Lead the Way, Gateway classes.**

Each PLTW Gateway unit engages students in activities that not only build knowledge but also empower students to develop essential skills such as problem solving, critical and creative thinking, communication, collaboration, and perseverance. All Butler Tech courses are semester long and immerse students in hands-on experiences that give them an opportunity to explore different careers using technology and other professional skills. Students work in teams and spend a majority of their class time problem solving and collaborating on solutions that allow them to try out their ideas.

**Butler Tech Courses offered within Edgewood City Schools:**

- **App Creators**
- **Design and Modeling**
- **Innovators and Makers**
- **Medical Detectives**

**Butler Tech**

# Butler Tech Courses offered within Edgewood Middle School

### App Creators | *7th Grade*

App Creators will expose students to computer science as a means of computationally analyzing and developing solutions to authentic problems through mobile app development, and will convey the positive impact of the application of computer science to other disciplines and to society.

### Design and Modeling | *7th Grade*

Design and Modeling allows students to apply the design process to solve problems and understand the influence of creativity and innovation in their lives. They work in teams to design a playground and furniture, capturing research and ideas in their engineering notebooks. Using Inventor® design software, students create a virtual image of their designs and produce a portfolio to showcase their innovative solutions.

### Innovators and Makers | *8th Grade*

Innovators and Makers will allow students to discover computer science concepts and skills by creating personally relevant, tangible, and sharable projects. Throughout the unit, students will learn about programming for the physical world by blending hardware design and software development.

They will design and develop a physical computing device, interactive art installation, or wearable, and plan and develop code for microcontrollers that bring their physical designs to life.

Physical computing projects will promote student awareness of interactive systems, including Internet of Things (IoT) devices, and broaden their understanding of abstract computer science concepts through meaningful and authentic applications.

### Medical Detectives | *8th Grade*

Become medical detectives and solve medical mysteries! Apply experimental design, creative thinking, and problem-solving to investigate the inner workings of the human body, diagnose disease, and improve human health.

In the Medical Detectives course, students play the role of real-life medical detectives as they collect and analyze medical data to diagnose disease. They solve medical mysteries through hands-on projects and labs, measure and interpret vital signs, dissect a sheep brain, investigate disease outbreaks, and explore how a breakdown within the human body can lead to dysfunction.

" I've learned so many new and interesting things in this class. It makes me excited about what I will get to learn when I'm in High School."

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*See your guidance counselor for registration information.*

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