## **BUCKNELL AND VIRGINIA TECH**

## THINKABIT LABS PARTNERSHIP

INCREASING ACCESS TO CAREER EXPLORATION AND ENGINEERING EXPERIENCES



#### THE MISSION OF THINKABIT LAB

Virginia Tech's DC Metro Area Thinkabit Lab STEM Education and Workforce Development Programs is the longest-serving collaborator in the Qualcomm Thinkabit Lab network. The mission of the Thinkabit Lab is to serve Washington, D.C. area students, teachers, administrators, parents, and collaborators in technical career exploration and the hands-on electronic and programming foundations of IOT and Smart Cities, AI and robotics automation, sensors, actuators, and data collection and analysis.



### THINKABIT LAB OPPORTUNITIES



At the Thinkabit Lab, students have the opportunity to explore engineering and various career paths in technology companies while engaging in enjoyable and creative hands-on engineering projects. This combination of career exploration and engineering activities helps students envision their potential roles in the future workforce and understand how they can leverage technology to address real-world challenges.

# OPPORTUNITIES FOR BUCKNELL STUDENTS, TEACHERS, AND COMMUNITY



- Quarterly opportunities for Bunckell students in all grades in inquiry-based STEM experiences, including hands-on modeling, invention and innovation, and prototyping and algorithmic thinking for all students.
- Additional physical computing and technical career exploration experiences for 4th through 6th grades.
- Enhance students' pathways to STEM and CTE coursework in Computer Science, Technology and Engineering, and similar courses in Sandburg or Whitman Middle Schools and West Potomac High School.
- Use of the creative spaces for other schoolbased activities, parent and community meetings, and teacher professional learning at other times.

#### OPPORTUNITIES FOR FCPS AND VIRGINIA TECH AT BUCKNELL



- Continue the 9-year collaboration with Virginia Tech's Thinkabit Lab supporting Young Scholars programs in technical careers and the foundations of physical computing, the Internet of Things, and the future of AI, often serving over 3000 visitors per year.
- Work-based learning opportunities for FCPS high school students (internships, externships, mentorships, and similar opportunities).
- Expanding the new Invention Virginia program in FCPS as a complement or add-on to Science and Engineering Fairs, or as integrated STEM or Engineering curricula using design processes.

TO LEARN MORE, VISIT
VA TECH THINKABIT
LAB'S WEBSITE

