

### **APPLICATION PROCESS**

To apply, scan the QR code or visit: <u>https://bit.ly/kysusap2024</u>



Application packets are received by the program director and reviewed by a panel of professionals from relevant disciplines. Selections are made based on academic performance, letters of recommendation, and applicant essay(s) or letter(s) of interest.

#### FOR MORE INFORMATION, CONTACT:

Dr. Buddhi Gyawali Director of SAP and Professor of Geospatial Applications 502-597-6029 buddhi.gyawali@kysu.edu Opportunities for positive youth development



KENTUCKY STATE UNIVERSITY

Cooperative Extension Program

Cooperative Extension Building 400 East Main St. Frankfort, KY 40601 502-597-6029 www.kysu.edu/ag @kysuag

This institution is an equal opportunity provider.





## SUMMER APPRENTICESHIP PROGRAM JUNE 23 – JULY 14, 2024



This program, funded by the National Science Foundation (NSF), introduces high school students to Science, Technology, Engineering, and Mathematics (STEM) fields, covering agricultural sciences, environmental monitoring, and open source technology.

The program aims to empower the next generation of scientists, technology professionals, and industry leaders through hands-on experiences with real scientists and technical professionals at Kentucky State University. The activities include mentor-led experiential research, visits to culturally significant sites across Kentucky, tours of STEM workplaces, and college preparation activities.



# TEAM BUILDING AND PERSONAL DEVELOPMENT

Workshops involve teamwork to cultivate problem-solving skills addressing real-world issues. Field trips promote environmental stewardship and appreciation for natural resources. The program encourages an ongoing dialogue for reflection and adjustment, ensuring a supportive learning environment.

### **NAVIGATING THE COLLEGE PROCESS**

Participants are introduced to campus life, faculty expectations and campus accommodations and student support services to enhance their college experience. Workshops cover the role of technology in higher education, including essential skills (writing, critical thinking, data analysis, communication) and emerging technologies such as artificial intelligence and robots.

### **OPEN-SOURCE BUILD CHALLENGE**

Participants will engage with an assortment of open-source build hardware and software tools to collaboratively design integrated systems for data collection and processing using UAV-Drones and other instruments for soil, water and vegetation studies. These systems will be tailored for use in agricultural and forested areas to monitor environmental conditions over time.

### MENTOR-BASED EXPERIENTIAL RESEARCH PROJECTS

Participants engage in mentor-guided scientific research projects that culminate in the development of formal presentations and research documents. Focus areas include Aquaculture, Agriculture and Food Sciences, Computer Science, Microbiology, Behavioral Sciences, Geospatial Sciences, and Nutrition.



"SAP provides essential education and experiences that youth need as they enter life after high school." -SAP PARENT

