

# LSU CAIN CENTER OFFERS ELECTIVE COURSE TRAINING FOR MIDDLE SCHOOLS CREDIT

## **AQUAPONICS**

This course employs problem-based learning to immerse students in the fascinating intersection of plant cultivation and fish farming within a single aquaponic system. Participants engage in designing and engineering solutions for their unique systems, gaining insights into chemistry, ecology, engineering, and the practical aspects of raising and marketing their own food products. Students will not only cultivate a deep understanding of the intricate dynamics between plants and fish in aquaponics but will also contribute to the local community by producing locally sourced and sustainably raised food through a hands-on experience that integrates various disciplines for a holistic learning adventure.

### **STEP INTO STEM**

Embark on a year-long educational journey where students immerse themselves in project- and problem-based learning, exploring key domains of the STEM Pathways: engineering, digital design, bioscience, computer science, and environmental protection and sustainability.

Students tackle real-world challenges within the community, offering innovative solutions and sharing their newfound knowledge with local stakeholders. Throughout this experiential learning process, students not only master 21st-century skills but also emphasize the importance of building connections within the community. This course is designed to empower student voices, enhance presentation and

communication skills, and refine critical thinking and processing abilities. Join us as we foster a dynamic learning environment that not only educates but also actively shapes the future leaders of tomorrow.

# **Step Into Computer Science**

This year-long course equips students with the foundational knowledge of computational thinking and computer science. Through interactive exercises using block-based programming, students will delve into the exciting world of coding, where they will create animations, games, art, and stories, fostering creativity and problem-solving skills.

Throughout the course, participants will gain a solid understanding of the basics of programming, laying the groundwork for more advanced studies in computer science. Emphasis will be placed on applying computational thinking to real-life situations, allowing students to see the practical applications of the concepts they learn.

# FOR MORE INFORMATION:

Please contact Nicole Foster at nfoster1@lsu.edu. or stempathways@lsu.edu, for more information.



