EASTERN LONG ISLAND ACADEMY OF APPLIED TECHNOLOGY

COMPUTER SCIENCE AND APP DEVELOPMENT

Keys to a booming future.

Jobs in computer science and application development are among the highest paid and most in-demand in today's economy. Computing drives innovation in science, engineering, business, entertainment, and education. A solid foundation in computer science will provide you with the problem-solving skills and logical thinking that will give you a competitive advantage in your career, whatever field you choose. Mastering the language of computing can provide you with a critical advantage in the job market. Whether you want to be a scientist, technician, or engineer, or want to develop the next "killer app," here's your opportunity to step into one of today's hottest fields.

COURSE TITLE: **COMPUTER SCIENCE AND APP DEVELOPMENT**

COURSE DESCRIPTION

Students will be exposed to a diverse set of computational thinking concepts, fundamentals and tools, allowing them to gain understanding and build confidence. Students use visual, block-based programming and seamlessly transition to text-based programming with languages such as Python® to create apps and develop websites, and learn how to integrate computers to put their design into practice. This course will also focus on further developing computational thinking skills through the medium of Android™ App development for mobile platforms. The course utilizes industry-standard tools such as Android Studio, Java™ programming language, XML and device emulators. Students collaborate to create original solutions to problems of their own choosing by designing and implementing user interfaces and Web-based databases. Projects and problems include app development, visualization of data, cybersecurity and simulation. PLTW® is recognized by the College Board as an endorsed provider of curriculum and professional development for **AP® Computer Science Principles (AP CSP)**. This endorsement affirms that all components of PLTW® Computer Science Program's offerings are aligned to the AP Curriculum Framework standards and the AP CSP assessment. This course also aligns with the **AP CS A** course.

EDUCATIONAL OPPORTUNITIES

Students will take the **AP® Computer Science Principles exam**. Students who earn a 3 or higher will be eligible for college credit. Advanced students will be encouraged to take the AP Computer Science A exam as well. There is an additional cost to take the exams.

SUGGESTED SUPPORTIVE COURSES

Math A and B, Physics

Students enrolling in this program are expected to show proficiency in math and science by scoring a minimum of 80% on the Algebra Regents and a minimum of 80% on the Living Environment Regents.

ADDITIONAL INFORMATION

RELATED COURSES ..... Aviation/Professional Pilot Training, Computer Technology and Repair, Engineering

COSTS ..... Uniform and supplies approximately $200

LENGTH OF COURSE..... 1 year

LOCATION ..... Gary D. Bixhorn Technical Center

CTE/ACADEMIC CREDIT ..... Pending