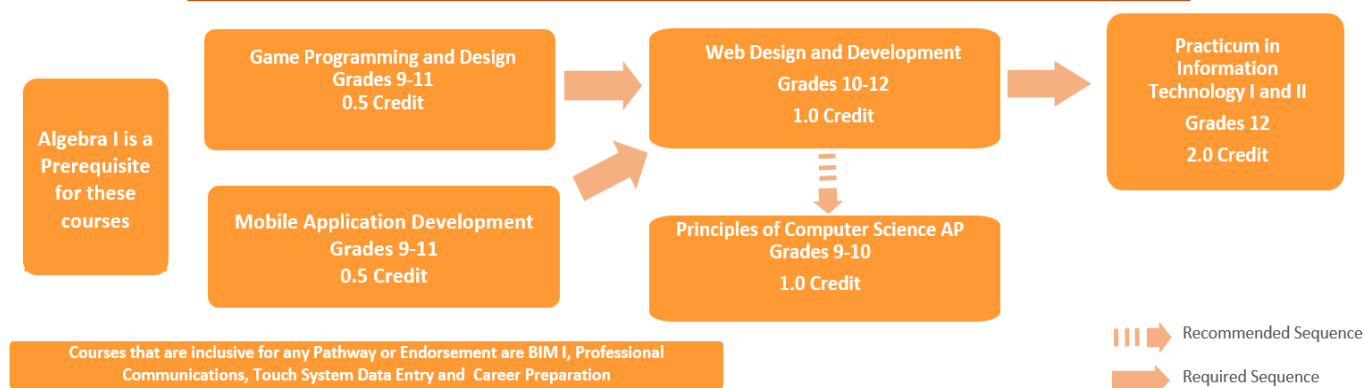


Business & Industry Pathway – Web Design and Development



GAME PROGRAMMING AND DESIGN

KISD #: 4928

Grades: 9-11 .5 Credit

Prerequisite: Algebra 1

Students are provided opportunities to design, implement, and present a variety of computer and board games. Students will:

- Develop digital citizenship by game play and researching.
- Play, analyze, evaluate, and create board games to understand the design process individually and collaboratively.

Required Fee/Materials: Yes

MOBILE APPLICATION DEVELOPMENT

KISD #: 4930

Grades: 9-11 .5 Credit

Prerequisite: Algebra 1

This course focuses on the design and programming of mobile applications software for Android cell phones and tablets. Topics covered in this course include:

- Introduction to basic programming concepts using Scratch and Alice
- Programming mobile apps for Android devices
- Designing a user-friendly interface
- Concepts of digital citizenship and copyright law

Required Fee/Materials: Yes

WEB DESIGN & DEVELOPMENT

KISD #: 914718

Grades: 10-12 1 Credit

Prerequisite: Game Programming and Design or Mobile Application Development

Web Design is a course in web programming and design. Students will learn the foundations of creating, accessing, and managing information on the Internet with a focus on programming and design principles. The course content will utilize HTML (Hypertext Markup Language), CSS (Cascading Style Sheets) and Adobe Photoshop (image manipulation software) in the development of web pages and graphics.

Required Fee/Materials: Yes

PRACTICUM IN INFORMATION TECHNOLOGY

KISD #: 914518

PEIMS: 13028000

Grades: 12 2.0 Credits

Prerequisite: Web Design & Development

Students will continue development of projects related to web development. Students may work with industry or district partners in web development projects.

Required Fee/Materials: Yes

Advanced Grade Points: Yes

ADVANCED PLACEMENT COMPUTER SCIENCE PRINCIPLES

KISD #: 4902

Grades: 9-10 1 Credit

Prerequisite: Algebra 1

This course explores a variety of big ideas in Computer Science. College credit is available upon successful completion of the AP test at the end of this course. Concepts in this course include:

- Use of computer software to create solutions to various problems
- Data, information, and databases
- Algorithms and programming
- Global impact of computers and computing

Required Fee/Materials: Yes

Advanced Grade Points: Yes