

CFISD Project-based Research in Computer Science

Scope and Sequence

Course Description:

This course is a supervised research study/project-based class where students will apply knowledge and skills from previous Computer Science courses in a related advanced/specialized field of study. Topics will include, but are not limited to, supporting network security and Windows operating system. Students are required to submit a formal project plan within 15 school days after enrollment in the course. The plan should specify the additional languages and/or technologies that will be studied and utilized, along with an overview of the culminating project.

- Grades 11-12
- Required prerequisite: Computer Science III K or concurrent
- Satisfies advanced course requirement for Business & Industry endorsement.
- MTA Certifications satisfy the requirement to earn a performance acknowledgement.
- Lab supplies or fee may be required.

TEKS

Program of Study: Programming & Software Development

Cluster: STEM / Information Technology

Endorsement: STEM / Business & Industry

- Meets advanced course requirement (Y/N): Yes
- Meets foundation requirement for math, science, fine arts, English, LOTE (Y/N-area): N

Industry Certification/Credentials: Microsoft Technology Associate Security Fundamentals and Microsoft Technology Associate Server Administration Fundamentals.

Instructional Units	Pacing
Independent study project for personal enrichment and professional development Verbal and nonverbal communication skills Professional and ethical behavior standards Design and develop a research project	Full year

Primary Instructional Materials: will vary depending on project