

Advanced Professional Studies: Technology Solutions and Logistics (2018)

Mehlville School District
Advanced Professional Studies/CAPS
Grades 11 - 12, Duration 1 Year, 3 Credits

Rationale

St. Louis CAPS provides high school juniors and seniors the opportunity to fast-forward beyond college to test-drive their future in high-skill, high-demand careers.

Course Description

The Technology Solutions and Logistics course is ideal for students who are interested in developing the professional and technical skills required to forge forward in exploring all areas of technology and creative design. Immerse yourself in a professional environment while you tackle and solve real-world problems using a vast array of technology and design skills. Students interested in technology will perform real world projects for clients utilizing the expertise of diverse guest instructors, mentors and business partners. Strong emphasis is placed on software engineering skills such as programming methodology and problem solving using multiple languages, algorithm design and development, data abstraction and well documented programming, testing and debugging. Students interested in design will create a wide array of digital assets in a profession-based learning environment, which provides opportunities to collaborate with mentors and business clients. Students will network with mentors and business partners delivering real products to their clients as well as creating a professional portfolio that illustrates their creative talent. Students will complete job shadows and an internship with a business and industry partner.

Prerequisites

Open to: 11,12
Credit 3 units: two semesters

Course Objectives

The student will develop professional and technical skills through project-based learning.
The student will discover technology by working collaboratively on a business project that encompasses many areas of technology, discovering in the process how each technical component contributes to the cohesive whole.
The student will solve a business problem and/or improve the quality of people's lives.
The student will work collaboratively with other STL CAPS strands, e.g. Engineering and Advanced Manufacturing, Medicine and Healthcare, Global Business and Entrepreneurship. Projects will encompass hardware and software applications, e.g. development of marketing collateral, logo development, website design, and database development.
The student will work with business partners and will communicate with them on a frequent basis via email or in person.
The student will receive feedback from business partners on project work, career exploration and industry trends.
The student will have the opportunity to learn from guest speakers from many technology areas, and make site visits to local businesses showcasing technology.
The student will work on a semester project with a collaborative group to design and create a "working system" that incorporates many of the topic areas related to technology solutions.
The student will learn about the entrepreneurial mindset and demonstrate these characteristics when solving problems for business and industry partners.

BOE 12/14/17