

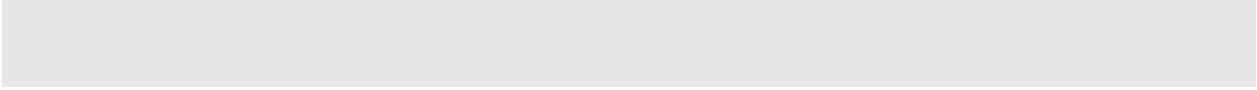
COURSES



HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/ DOCTORAL PROFESSIONAL DEGREE

OCCUPATIONS	MEDIAN WAGE	ANNUAL OPENINGS	% GROWTH

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES



COURSE INFORMATION

COURSE NAME	COURSE NUMBER AND CREDITS	PREREQUISITES (PREQ) COREQUISITES (CREQ)	GRADE
Fundamentals of Computer Science	8801 (1 credit)	None	9-10
AP Computer Science Principles	8803 (1 credit)	Algebra I & Fundamentals of Computer Science	10-11
AP Computer Science A	8805AP & 8806AP (2 credits)	AP Computer Science Principles	11-12
Project-Based Research	8807 (1 credit)	Digital Forensics	12

COURSE DESCRIPTIONS

Fundamentals of Computer Science:

Students will experience the major topics, big ideas, and computational thinking practices used by computing professionals to solve problems and create value for others. This course will empower students to develop computational thinking skills while building confidence that prepares them to advance to Computer Science Principles.

AP Computer Science Principles:

Satisfies a LOTE credit

Using Python® as a primary tool, students explore and become inspired by career paths that utilize computing, discover tools that foster creativity and collaboration, and use what they've learned to tackle challenges like app development and simulation. *This course is endorsed by the College Board, giving students the opportunity to take the AP CSP exam for college credit.*

AP Computer Science A:

Satisfies an Advanced Math and LOTE credit

Digital forensics is an evolving discipline concerned with analyzing anomalous activity on computers, networks, programs, and data. As a discipline, it has grown with the emergence of a globally-connected digital society. As computing has become more sophisticated, so too have the abilities of malicious agents to access systems and private information. By evaluating prior incidents, digital forensics professionals have the ability to investigate and craft appropriate responses to disruptions to corporations, governments, and individuals. Whereas cybersecurity takes a proactive approach to information assurance to minimize harm, digital forensics takes a reactive approach to incident response.

Project-Based Research:

Project-Based Research is a course for students to research a real-world problem. Students are matched with a mentor from the business or professional community to develop an original project on a topic related to career interests. Students use scientific methods of investigation to conduct in-depth research, compile findings, and present their findings to an audience that includes experts in the field. To attain academic success, students must have opportunities to learn, reinforce, apply, and transfer their knowledge and skills in a variety of settings.



Courses in yellow are advanced courses for endorsement purposes.