

Information Technology (IT) Fundamentals – Grade: 9-10

Prerequisite None

Information Technology (IT) Fundamentals introduces the essential technical and professional skills required for students to pursue programs leading to professional careers and IT certifications. Students investigate career opportunities and technologies in four major IT areas: Information Services and Support, Network Systems, Programming and Software Development, and Interactive Media. Students will evaluate the impact of IT on other career clusters. The focus of the IT Fundamentals course is the introduction of skills related to information technology basics, Internet fundamentals, network systems, computer maintenance/upgrading/troubleshooting, computer applications, programming, graphics, Web page design, and interactive media. Students explore ethical issues related to computers and Internet technology and develop teamwork and communication skills that will enhance their employability. *Recommended prerequisite(s): Keyboarding course(s) or teacher-approved demonstration and documentation of touch keyboarding skills*

Economics and Personal Finance – Grade: 9-12

Prerequisite None, CO-OP Available

Students learn how to navigate the financial decisions they must face and to make informed decisions related to career exploration, budgeting, banking, credit, insurance, spending, taxes, saving, investing, buying/leasing a vehicle, living independently, and inheritance. Development of financial literacy skills and an understanding of economic principles will provide the basis for responsible citizenship and career success. In addition to developing personal finance skills, students in the 36-week course will also study basic occupational skills and concepts in preparation for entry-level employment in the field of finance. The course incorporates all economics and financial literacy objectives included in the *Code of Virginia* §22.1-200-03B. The cooperative education method is available for this course. Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year.

Design, Multimedia, and Web Technologies – Grade: 10-12

Prerequisite None, CO-OP Available

Students develop proficiency in designing and creating desktop-published projects, multimedia presentations/projects, and Web sites, using industry-standard application software. Students apply principles of layout and design in completing projects. Students create portfolios that include a résumé and a variety of desktop-published, multimedia, and Web-site projects produced in the course. The cooperative education method is available for this course. In this method, classroom instruction is combined with on-the-job training in an approved position, supervised continuously throughout the school year, to broaden the students' educational experiences.

Design, Multimedia, and Web Technologies, Advanced – Grade: 10-12

Prerequisite Design, Multimedia, and Web Technologies, Design, Multimedia, and Web Technologies, CO-OP Available

Students develop advanced skills for creating desktop-published, interactive multimedia, and Web-site projects. Students work with sophisticated hardware and software, applying skills to real-world projects. The cooperative education method is available for this course. In this method, classroom instruction is combined with on-the-job training in an approved position, supervised continuously throughout the school year, to broaden the students' educational experiences.

Principles of Business & Marketing Management – Grade: 10-12

Prerequisite None, CO-OP Available

Students discover the roles of business and marketing in the free enterprise system and the global economy. Students will explore the business of the sports industry, team management, and recreation operation. Basic financial concepts of banking, insurance, credit, inheritance, taxation, and investments are investigated to provide a strong background as students prepare to make sound decisions as consumers, wage earners, and citizens. The real-world impact of technology, effective communication, and interpersonal skills is evident throughout the course. This course supports career development skills and explores career options. This course also supports practical application in “game-day” preparation, field management, and other hands-on, practical opportunities.

Cyber Security – Grade: 10-12

Prerequisite None, CO-OP Available

This course focuses on the evolving and all-pervasive technological environment with an emphasis on securing personal, organizational, and national information. Students will be introduced to the principles of cybersecurity, explore emerging technologies, examine threats and protective measures, and investigate the diverse high-skill, high-wage, and high-demand career opportunities in the field of cybersecurity.

DE Computer Information Systems – Grade: 11-12

Prerequisite None, CO-OP Available

Students apply problem-solving skills to real-life situations through advanced integrated software applications, including printed, electronic, and Web publications. Students work individually and in groups to explore advanced computer maintenance activities, Web site development, programming, networking, emerging technology, and employability skills.

DE (Dual Enrolled) and Co-op is for 11th and 12 grades ONLY