Kennesaw Mountain High School: Career Tech Pathways

ARCHITECTURAL DRAWING & DESIGN PATHWAY

Introduction to Drafting and Design

This is the foundational course for the Architectural Drafting and Design pathway. Emphasis is placed on safety, geometric construction, fundamentals of computer-aided drafting, and multi-view drawings. Students learn drafting techniques through the study of geometric construction at which time they are introduced to computer-aided drafting and design. The standards are aligned with the national standards of the American Design Drafting Association (ADDA).

Pre-requisite: None

Architectural Drawing and Design I

The second course in the Architectural Drawing and Design pathway and introduces students to the basic terminology, concepts, and principles of architectural design. Emphasis is placed on house designs, floor plans, roof designs, elevations (interior and exterior), schedules, and foundations. The standards are aligned with the drafting and design standards in Georgia's technical colleges, thus helping students qualify for advanced placement to continue their education at the postsecondary level. Students who successfully complete this and other drafting courses should be prepared to take the End of Pathway Assessment. Competencies for the co-curricular student organization, SkillsUSA, are integral components of both the core employability skills standards and the technical skills standards.

Pre-requisite: Introduction to Drafting and Design

Architectural Drawing and Design II

The third course in the Architectural Drawing and Design pathway and builds on the skills developed in Architectural Drawing and Design I. Emphasis is placed on the design process, site plans, electrical plans, plumbing plans, sections and details, project presentations, and a course portfolio. The standards are aligned with the drafting and design standards in Georgia's technical colleges, thus helping students qualify for advanced placement should they continue their education at the postsecondary level. Students who successfully complete this and other drafting courses should be prepared to take an End of Pathway Assessment. Competencies for the cocurricular student organization, SkillsUSA, are integral components of both the core employability skills standards and the technical skills standards. The prerequisite for this course is Introduction to Drafting and Design and Architectural Drawing and Design I.

Pre-requisite: Architectural Drawing and Design I

AUDIO/VIDEO TECHNOLOGY & FILM PATHWAY

Audio Video Technology & Film – I

Course Description: This course will serve as the foundational course in the Audio & Video Technology & Film pathway. The course prepares students for employment or entry into a postsecondary education program in the audio and video technology career field. Topics covered may include, but are not limited to: terminology, safety, basic equipment, script writing, production teams, production and programming, lighting, recording and editing, studio production, and professional ethics. Skills USA, the Georgia Scholastic Press Association, Technology Student Association (TSA) and Student Television Network are examples of, but not limited to, appropriate organizations for providing leadership training and/or for reinforcing specific career and technical skills and may be considered an integral part of the instructional

program. All material covered in Audio & Video Technology & Film I will be utilized in subsequent courses. The pre-requisite for this course is advisor approval.

Pre-requisite: None

Audio Video Technology & Film – II

Course Description: This one credit course is the second in a series of three that prepares students for a career in Audio Video Technology and Film production and/or to transfer to a postsecondary program for further study. Topics include Planning, Writing, Directing and Editing a Production; Field Equipment Functions; Operational Set-Up and Maintenance; Advanced Editing Operations; Studio Productions; Performance; Audio/Video Control Systems; Production Graphics; Career Opportunities; and Professional Ethics. Skills USA, the Georgia Scholastic Press Association, Technology Student Association (TSA) and Student Television Network are examples of, but not limited to, appropriate organizations for providing leadership training and/or for reinforcing specific career and technical skills and may be considered an integral part of the instructional program.

Pre-requisite: AVTF-I

Audio Video Technology & Film – III

Course Description: This one-credit transition course is designed to facilitate student-led projects under the guidance of the instructor. Students work cooperatively and independently in all phases of production. A digital portfolio website will be created showcasing the best work. Skills USA, the Georgia Scholastic Press Association, Technology Student Association (TSA), and Student Television Network are examples of, but not limited to, appropriate organizations for providing leadership training and/or for reinforcing specific career and technical skills and may be considered an integral part of the instructional program.

Pre-requisite: AVTF-II

Broadcast Video Production – IV: Applications

Course Description: Broadcast/Video Production Applications is the fourth course in the BVP pathway and is designed to introduce dedicated students in the skills necessary to gain entry level employment or to pursue a postsecondary degree or certificate. Topics include advanced camcorder techniques, audio production, scriptwriting, producing, directing, editing, employability skills, and development of a digital portfolio to include resume', references, and production samples. Skills USA, the Georgia Scholastic Press Association, Technology Student Association (TSA), and Student Television Network are examples of, but not limited to, appropriate organizations for providing leadership training and/or for reinforcing specific career and technical skills and may be considered an integral part of the instructional program. Instructor approval of digital portfolio (as needed for satisfactory completion of BVP 3) required prior to registration for this course.

Pre-requisite: AVTF III

BUSINESS ACCOUNTING PATHWAY

Introduction to Business and Technology

Course Description: Introduction to Business & Technology is the foundational course for Advanced Accounting, Business Accounting, and Financial Services pathways. The course is designed for high school students as a gateway to the career pathways above, and provides an overview of business and technology skills required for today's business environment. Knowledge of business principles, the impact of financial decisions, and technology proficiencies demanded by business combine to establish the elements of this course.

Emphasis is placed on developing proficient fundamental computer skills required for all career pathways. Students will learn essentials for working in a business environment, managing a business, and owning a business. The intention of this course is to prepare students to be successful both personally and professionally in an information-based society.

Pre-Requisite: None

Financial Literacy

How money smart are you? Step into this course specifically designed for high school students to understand the importance of the financial world, including planning and managing money wisely. Areas of study taught through application in personal finance include sources of income, budgeting, banking, consumer credit, credit laws and rights, personal bankruptcy, insurance, spending, taxes, investment strategies, savings accounts, mutual funds and the stock market, buying a vehicle, and living independently. Based on the hands-on skills and knowledge applied in this course, students will develop financial goals, and create realistic and measurable objectives to be MONEY SMART! Through project-based learning activities and tasks, students will apply mathematical concepts in realistic scenarios and will actively engage by applying the mathematics necessary to make informed decisions related to personal finance. Financial Literacy places great emphasis on problem solving, reasoning, representing, connecting and communicating financial data. Various forms of technologies and internet research will be highlighted to expose students to the resources available when managing personal financial goals. Employability skills are integrated into activities, tasks, and projects throughout the course standards to demonstrate the skills required by business and industry. Competencies in the co-curricular student organization, Future Business Leaders of America (FBLA), are integral components of the employability skills standard for this course.

Pre-Requisite: Introduction to Business and Technology

Principles of Accounting I

Where does all the money go? As a person would not go to a foreign country and not learn the language, accounting is the "language of business." Principles of Accounting 1 is a skill-level course that is of value to all students pursuing a strong background in business, marketing, and management. Using financial information, students will learn how to make decisions about planning, organizing, and allocating resources using accounting procedures. Performing accounting activities for sole proprietorships and corporations following Generally-Accepted Accounting Procedures are included in the course. Students analyze business transactions and financial statements, perform payroll, and evaluate the effects of transactions on the economic health of a business. Various forms of technologies and internet research

will be highlighted to expose students to the resources available when learning the language of business. Employability skills are integrated into activities, tasks, and projects throughout the course standards to demonstrate the skills required by business and industry. Competencies in the co-curricular student organization, Future Business Leaders of America (FBLA), are integral components of the employability skills standard for this course.

Pre-Requisite: Financial Literacy

CONSTRUCTION PATHWAY

Occupational Safety and Fundamentals

This course is the foundational course that prepares students for a pursuit of any career in the field of construction. It prepares the student for the basic knowledge to function safely on or around a construction site and in the industry in general. It provides the student with the option for an Industry Certification in the Construction Core. This course explains the safety obligations of workers, supervisors, and managers to ensure a safe workplace. Course content discusses the causes and results of accidents and the dangers of rationalizing risks. It includes the basic content of OSHA 10-hour safety standards. It also includes the basic knowledge and skills needed in the following areas: construction math, hand and power tools used in the field, general blueprints, and basics of rigging safety.

Pre-Requisite: None

Introduction to Construction

This course is preceded by the Occupational Safety and Fundamentals course. This course offers an opportunity for students to build on their knowledge and skills developed in Occupational Safety. It introduces them to four construction craft areas and is also the second step towards gaining a Level One Industry Certification in one of the craft areas. The goal of this course is to introduce students to the history and traditions of the carpentry, masonry, plumbing, and electrical craft trades. Students will explore how the various crafts have influenced and been influenced by history. The student will also learn and apply knowledge of the care and safe use of hand and power tools as related to each trade. In addition, students will be introduced to, and develop skills to differentiate between blueprints, as is related to each individual craft area.

Pre-Requisite: Occupational Safety and Fundamentals

Carpentry I

This course is preceded by Introduction to Construction. This course is the third of four courses that provides the student a solid foundation in carpentry skills and knowledge. It is the third step in gaining a Level One Industry Certification in Carpentry. This course provides an overview of the building materials used in the carpentry craft. It teaches techniques for reading and using blueprints and specifications especially as related to the carpentry craft. It provides specific knowledge and skills in site layout and floor and wall framing systems. It includes the basic industry terminology for a carpentry craftsperson.

Pre-Requisite: Introduction to Construction

Carpentry II

This course is preceded by Carpentry I and is the fourth of four courses that provides the student a solid foundation in carpentry skills and knowledge. It is the final step in gaining a Level One Industry Certification in Carpentry. This course provides the knowledge of various kinds of roof systems. It provides knowledge and skills for layout and cutting of the various types of roof rafters. It provides knowledge and skills for installing exterior doors, windows, and skylights. It also provides the student with knowledge and skills to layout, cut, and install various types of stairs and the code requirements needed to properly do so

Pre-Requisite: Carpentry I

HOSPITALITY AND TURISM-CULINARY PATHWAY

Introduction to Culinary Arts

This foundational course designed to introduce students to fundamental food preparation terms, concepts, and methods in Culinary Arts where laboratory practice will parallel class work. Fundamental techniques, skills, and terminology are covered and mastered with an emphasis on basic kitchen and dining room safety, sanitation, equipment maintenance and operation procedures. The course also provides an overview of the professionalism in the culinary industry and career opportunities leading into a career pathway to Culinary Arts. Mastery of standards through project-based learning, technical skills practice, and leadership development activities of Family, Career and Community Leaders of America, (FCCLA) will provide students with a competitive edge for either entry into the education global marketplace and/or the post-secondary institution of their choice to continue their education and training.

Pre-Requisite: None

Culinary Arts I

As the second course in the Culinary Arts Career Pathway, the prerequisite for this course is Introduction to Culinary Arts. Culinary Arts I is designed to create a complete foundation and understanding of Culinary Arts leading to postsecondary education or a food-service career. This fundamentals course begins to involve in-depth knowledge and hands-on skill mastery of culinary arts.

Pre-Requisite: Introduction to Culinary Arts

Culinary Arts II

As the third course in the Culinary Arts Pathway, the prerequisite for this course is Culinary Arts I. Culinary Arts II is an advanced and rigorous in-depth course designed for the student who is continuing in the Culinary Arts Pathway and wishes to continue their education at the postsecondary level or enter the food-service industry as a proficient and well-rounded individual. Strong importance is given to refining hands-on production of the classic fundamentals in the commercial kitchen. Pre-Requisite: Culinary Arts I.

ENGINEERING DRAFTING & DESIGN PATHWAY

Introduction to Drafting and Design

This is the foundational course for the Architectural Drafting and Design pathway. Emphasis is placed on safety, geometric construction, fundamentals of computer-aided drafting, and multi-view drawings.

Students learn drafting techniques through the study of geometric construction at which time they are introduced to computer-aided drafting and design. The standards are aligned with the national standards of the American Design Drafting Association (ADDA).

Pre-requisite: None

Survey of Engineering Graphics

This is the second course in the Engineering Drafting and Design Career Pathway. The course is designed to build student skills and knowledge in the field of engineering graphics/technical drafting. The course focus includes employability skills, career opportunities, applied math, working drawings that include sectional, auxiliary, detail and pictorial views, and pattern developments. In addition, elements in applied mathematics are integrated throughout the course.

Pre-requisite: Introduction to Drafting and Design

3-D Modeling and Analysis

Three-Dimensional (3D) Modeling and Analysis is a one-credit course that completes the pathway in Engineering Drafting and Design. Reverse engineering strategies are recommended for third level working drawings. Computer-aided design (CAD) is recommended for use extensively with each standard in the course. Focus is on employability strategies, career studies, applied math, fasteners, working drawings, and assembly drawings. The final culmination is a presentation project that contains information mastered throughout the three courses. Pre-requisite: Survey of Engineering Graphics

FINANCE PATHWAY

Introduction to Business and Technology

Course Description: Introduction to Business & Technology is the foundational course for Advanced Accounting, Business Accounting, and Financial Services pathways. The course is designed for high school students as a gateway to the career pathways above, and provides an overview of business and technology skills required for today's business environment. Knowledge of business principles, the impact of financial decisions, and technology proficiencies demanded by business combine to establish the elements of this course.

Emphasis is placed on developing proficient fundamental computer skills required for all career pathways. Students will learn essentials for working in a business environment, managing a business, and owning a business. The intention of this course is to prepare students to be successful both personally and professionally in an information-based society.

Pre-Requisite: None

Financial Literacy

Course Description: How money smart are you? Step into this course specifically designed for high school students to understand the importance of the financial world, including planning and managing money wisely. Areas of study taught through application in personal finance include sources of income, budgeting, banking, consumer credit, credit laws and rights, personal bankruptcy, insurance, spending, taxes, investment strategies, savings accounts, mutual funds and the stock market, buying a vehicle, and living independently. Based on the hands-on skills and knowledge applied in this course, students will

develop financial goals, and create realistic and measurable objectives to be MONEY SMART! Through project-based learning activities and tasks, students will apply mathematical concepts in realistic scenarios and will actively engage by applying the mathematics necessary to make informed decisions related to personal finance. Financial Literacy places great emphasis on problem solving, reasoning, representing, connecting and communicating financial data.

Pre-Requisite: Introduction to Business and Technology

Principles of Accounting I

Course Description: Where does all the money go? As a person would not go to a foreign country and not learn the language, accounting is the "language of business." Principles of Accounting 1 is a skill-level course that is of value to all students pursuing a strong background in business, marketing, and management. Using financial information, students will learn how to make decisions about planning, organizing, and allocating resources using accounting procedures. Performing accounting activities for sole proprietorships and corporations following Generally-Accepted Accounting Procedures are included in the course. Students analyze business transactions and financial statements, perform payroll, and evaluate the effects of transactions on the economic health of a business. Various forms of technologies and internet research will be highlighted to expose students to the resources available when learning the language of business. Employability skills are integrated into activities, tasks, and projects throughout the course standards to demonstrate the skills required by business and industry. Competencies in the co-curricular student organization, Future Business Leaders of America (FBLA), are integral components of the employability skills standard for this course. Principles of Accounting 1 may be the second course in the Advanced Business Pathway or the third course in the Business Accounting pathway in the Finance Cluster. Students enrolled in this course should have successfully completed Introduction to Business & Technology. If students are completing the Business Accounting pathway, successful completion of the Financial Literacy course prepares students to take an End of Pathway assessment in this career area.

GRAPHIC DESIGN PATHWAY

Introduction to Graphic and Design

Course Description: This course is designed as the foundational course for both the Graphics Production and Graphics Design pathways. The Graphics and Design course provides students with the processes involved in the technologies of printing, publishing, packaging, electronic imaging, and their allied industries. In addition, the Graphics and Design course offers a range of cognitive skills, aesthetics, and crafts that includes typography, visual arts, and page layout. Pre- requisite for this course is adviser approval.

Pre-Requisite: None

Graphic Design and Production

Course Description: As the second course in the Graphics Communication and Graphics Design Pathways, this course builds on knowledge and skills learned in the Introduction to Graphics and Design course and focuses on procedures commonly used in the graphic communication and design industries. Students will gain more experience in creative problem solving and the practical implementation of those solutions across multiple areas of graphic design and graphic communications. The prerequisite for this course is Introduction to Graphics and Design.

Pre-Requisite: Introduction to Graphic and Design

Advanced Graphic Design

Course Description: Students will continue to explore in an increasingly independent manner, the principles of design and layout procedures relating to the field of graphic design. Content will cover electronic systems and software programs used in graphic design, page composition, image conversion, and digital printing. Knowledge and skills in digital design and imaging will be enhanced through experiences that simulate the graphic design industry and school-based and work-based learning opportunities.

Pre-Requisite: Graphic Design and Production (Course 1 & 2)

Graphic Output Processes

Course Description: As the third course in the Graphics Communication Pathway, students will gain more advanced levels of experience to complete the output processes of various projects in an increasingly independent manner. Students also learn to manage the output and completion process as a whole including customer relations management, printing, finishing, and binding. Students will continue to accumulate work samples that will constitute their personal portfolio. Upon successful completion of the course, students are prepared to move into employment or a postsecondary educational environment where self-motivation and a high level of skill are expected. This is the final course in the Graphic Communication Pathway.

Pre-Requisite: Advanced Graphic Design

INFORMATION SUPPORT & SERVICES PATHWAY

Introduction to Digital Technology

This course is designed for high school students to understand, communicate, and adapt to a digital world as it impacts their personal life, society, and the business world. Exposure to foundational knowledge in hardware, software, programming, web design, IT support, and networks are all taught in a computer lab with hands-on activities and project focused tasks. Students will not only understand the concepts, but apply their knowledge to situations and defend their actions/decisions/choices through the knowledge and skills acquired in this course. Employability skills are integrated into activities, tasks, and projects throughout the course standards to demonstrate the skills required by business and industry. Competencies in the co-curricular student organization, Future Business Leaders of America (FBLA), are integral components of both the employability skills standards and content standards for this course. Various forms of technologies will be highlighted to expose students to the emerging technologies impacting the digital world. Professional communication skills and practices, problem-solving, ethical and legal issues, and the impact of effective presentation skills are taught in this course as a foundational knowledge to prepare students to be college and career ready. The knowledge and skills taught in this course build upon each other to form a comprehensive introduction to digital world. Introduction to Digital Technology is a course that is appropriate for all high school students. The pre-requisite for this course is advisor approval.

Pre-Requisite: None

IT Essentials

Can you fix it? What is wrong with it? Students taking this course will develop a skill set to solve computer problems, perform preventive maintenance, and explain functions of purposes of computer elements. Existing in a world full of computer technology, students will gain practical experience in assembling a computer system, installing an operating system, troubleshooting computers and peripherals, and using system tools and diagnostic software. Various forms of technologies will be used to expose students to resources, software, and applications of computer repair. Professional communication skills and practices, problem-solving, ethical and legal issues, and the impact of effective presentation skills are enhanced in this course to prepare students to be college and career ready. Employability skills are integrated into activities, tasks, and projects throughout the course standards to demonstrate the skills required by business and industry. Competencies in the co-curricular student organization, Future Business Leaders of America (FBLA), are integral components of the employability skills standard for this course. Information Technology (IT) Essentials is the second course in the Information Support and Services pathway in the Information Technology cluster. Students enrolled in this course should have successfully completed Introduction to Digital Technology.

Pre-Requisite: Introduction to Digital Technology

IT Support

How do you make the device work? Students will apply Information Technology Essentials skills to diagnose and correct computer problems. By building knowledge and skill, students will install, build, upgrade, repair, configure, troubleshoot, and perform preventative maintenance on computer hardware, operating systems, laptops and portable devices. Practical and hands-on experience of troubleshooting and maintenance will allow students to demonstrate mastery of skills. Various forms of technologies will be used to expose students to resources, software, and applications of computer repair. Professional communication skills and practices, problem-solving, ethical and legal issues, and the impact of effective presentation skills are enhanced in this course to prepare students to be college and career ready. Employability skills are integrated into activities, tasks, and projects throughout the course standards to demonstrate the skills required by business and industry. Competencies in the co-curricular student organization, Future Business Leaders of America (FBLA), are integral components of the employability skills standard for this course. Information Technology Support is the third course in the Information Support and Services pathway in the Information Technology cluster. Students enrolled in this course should have successfully completed Introduction to Digital Technology and Information Technology Essentials. After mastery of the standards in this course, students should be prepared to take the end of pathway assessment in this career area.

Pre-Requisite: IT Essentials

MARKETING & MANAGEMENT PATHWAY: SPORTS & ENTERTAINMENT PATHWAY

Marketing Principles

Course Description: Marketing Principles is the foundational course for all pathways in Marketing Education. Marketing Principles addresses all the ways in which marketing satisfies consumer and business needs and wants for products and services. Students develop an understanding of the functions

of marketing and how these functional areas affect all businesses. They learn basic marketing concepts and the role of marketing in our economy. Students also develop skills in applying economic concepts to marketing, distribution and logistics, marketing information management, finance in marketing, product/service planning, pricing mixes, promotional strategies, and personal selling. In order to increase the number of application experiences, students should participate in work-based learning activities and the student organization, DECA, An Association of Marketing Students. It is highly advantageous for students to participate in a school-based enterprise where available.

Pre-requisite: None

Intro to Sports & Entertainment Marketing

Course Description: This course introduces the student to the major segments of the Sports and Entertainment Industry and the social and economic impact it has on the local, state, national, and global economies. The products and services offered to consumers and the impact of marketing on these products and services are examined. Units include: Business Fundamentals, Product Mix, Product Knowledge, Product/Service Management, Business Regulations, Interpersonal Skills, Selling, Marketing-Information Management, Economics, Distribution, Pricing, Advertising, Publicity/Public Relations, Sales Promotion, Business Risks, and Organization. To increase the number of application experiences, students should participate in work-based learning activities and the student organization, (DECA, An Association of Marketing Students). It is highly advantageous for students to participate in a school-based enterprise where available.

Pre-requisite: Marketing Principles

Advanced Sports & Entertainment Marketing

Course Description: This course provides students opportunities to develop managerial and analytical skills and deepen their knowledge in sports/entertainment marketing. Topical units include: Marketing-Information Management, Selling, Publicity/Public Relations, Sales Promotion, Management of Promotion, Product Mix, Pricing, Positioning, and Marketing Planning. Project-based instruction, together with a variety of work-based learning activities, should be incorporated in this course to provide real-world application. Competitive event standards for the co-curricular student organization (DECA, An Association of Marketing Education Students) are integral components of the curriculum's core employability and technical skills' standards. Therefore, DECA competitive events should be incorporated with other instructional strategies developed for the course. Pre-requisites: Marketing Principles, Intro to Sports & Entertainment Marketing

Pre-Requisite: Sports and Entertainment Marketing

Entrepreneurship: Building a Business

Course Description: Entrepreneurship: Building a Business, an imperative component of a strong economy, is based on individuals who are creative thinkers and risk takers. Therefore, students in this entrepreneurship course focus on recognizing a business opportunity, starting a business based on the recognized opportunity, and operating and maintaining that business. This course begins by moving students from the typical "what is" educational focus to the "what can be" focus. Preparation of a business plan allows students to apply the functional areas of accounting, finance, marketing, and management to the planned business, as well as to the legal and economic environments in which a new

venture operates. This course may be taken as a part of a student's Marketing Pathway or may serve as a standalone course for students in other disciplines wishing to explore business ownership. In order to increase the number of application experiences, students should participate in work-based learning activities and the student organization, DECA, An Association of Marketing Students. It is highly advantageous for students to participate in a school– based enterprise where available.

Pre-requisite: Marketing Principles

Advanced Marketing

Course Description: Advanced Marketing builds on the principles and concepts taught in Marketing Principles. Students assume a managerial perspective in applying economic principles in marketing, analyzing operational needs, examining distribution and financial alternatives, managing marketing information, pricing products and services, developing product/service planning strategies, promoting products and services, purchasing, and professional sales. This course also deals with global marketing in that students analyze marketing strategies employed in the U.S. versus those employed in other countries. In order to increase the number of application experiences, students should participate in work based learning activities and the student organization, DECA, An Association of Marketing Students. It is highly advantageous for students to participate in a school–based enterprise where available.

Pre-requisites: Marketing Principles, Entrepreneurship: Building a Business

PROGRAMMING PATHWAY

Introduction to Digital Technology

This course is designed for high school students to understand, communicate, and adapt to a digital world as it impacts their personal life, society, and the business world. Exposure to foundational knowledge in hardware, software, programming, web design, IT support, and networks are all taught in a computer lab with hands-on activities and project focused tasks. Students will not only understand the concepts, but apply their knowledge to situations and defend their actions/decisions/choices through the knowledge and skills acquired in this course. Employability skills are integrated into activities, tasks, and projects throughout the course standards to demonstrate the skills required by business and industry. Competencies in the co-curricular student organization, Future Business Leaders of America (FBLA), are integral components of both the employability skills standards and content standards for this course. Various forms of technologies will be highlighted to expose students to the emerging technologies impacting the digital world. Professional communication skills and practices, problem-solving, ethical and legal issues, and the impact of effective presentation skills are taught in this course as a foundational knowledge to prepare students to be college and career ready. The knowledge and skills taught in this course build upon each other to form a comprehensive introduction to digital world. Introduction to Digital Technology is a course that is appropriate for all high school students.

Pre-Requisite: None

Computer Science Principles

How can computing change the world? What is computer science? Engage your creativity, demonstrate and build your problem-solving ability all while connecting the relevance of computer science to the society! Computer Science (CS) Principles is an intellectually rich and engaging course that is focused on building a solid understanding and foundation in computer science. This course emphasizes the content,

practices, thinking and skills central to the discipline of computer science. Through both its content and pedagogy, this course aims to appeal to a broad audience. The focus of this course will fall into these computational thinking practices: connecting computing, developing computational artifacts, abstracting, analyzing problems and artifacts, communicating, and collaborating. Various forms of technologies will be used to expose students to resources and application of computer science. Professional communication skills and practices, problem-solving, ethical and legal issues, and the impact of effective presentation skills are enhanced in this course to prepare students to be college and career ready. Employability skills are integrated into activities, tasks, and projects throughout the course standards to demonstrate the skills required by business and industry. Computer Science Principles is the second course in the pathways Programming and Computer Science in the Information Technology Cluster. Students enrolled in this course should have successfully completed Introduction to Digital Technology.

Pre-Requisite: Introduction to Digital Design

AP Computer Science Principles
https://apcentral.collegeboard.org/about-ap/news-changes/ap-computer-science-principles

AP Computer Science A
https://apcentral.collegeboard.org/courses/ap-computer-science-a/course

WEB AND DIGITAL DESIGN PATHWAY
Introduction to Digital Technology
This course is designed for high school students to understand, communicate, and adapt to a digital world as it impacts their personal life, society, and the business world. Exposure to foundational knowledge in hardware, software, programming, web design, IT support, and networks are all taught in a computer lab with hands-on activities and project focused tasks. Students will not only understand the concepts, but apply their knowledge to situations and defend their actions/decisions/choices through the knowledge and skills acquired in this course. Employability skills are integrated into activities, tasks, and projects throughout the course standards to demonstrate the skills required by business and industry. Competencies in the co-curricular student organization, Future Business Leaders of America (FBLA), are integral components of both the employability skills standards and content standards for this course. Various forms of technologies will be highlighted to expose students to the emerging technologies impacting the digital world. Professional communication skills and practices, problem-solving, ethical and legal issues, and the impact of effective presentation skills are taught in this course as a foundational knowledge to prepare students to be college and career ready. The knowledge and skills taught in this course build upon each other to form a comprehensive introduction to digital world. Introduction to Digital Technology is a course that is appropriate for all high school students.

Pre-Requisite: None

Digital Design
Using web design as the platform for product design and presentation, students will create and learn digital media applications using elements of text, graphics, animation, sound, video and digital imaging for various format. The digital media and interactive media projects developed and published showcase the student skills and ability. Emphasis will be placed on effective use of tools for interactive multimedia

production including storyboarding, visual development, project management, digital citizenship, and web processes. Students will create and design web sites that incorporate digital media elements to enhance content of web site. Various forms of technologies will be used to expose students to resources, software, and applications of media. Professional communication skills and practices, problem-solving, ethical and legal issues, and the impact of effective presentation skills are enhanced in this course to prepare students to be college and career ready. Employability skills are integrated into activities, tasks, and projects throughout the course standards to demonstrate the skills required by business and industry. Competencies in the co-curricular student organization, Future Business Leaders of America (FBLA), are integral components of the employability skills standard for this course.

Pre-Requisite: Introduction to Digital Design

Web Design

Can you think of any company that does not have a web presence? Taking this course will equip students will the ability to plan, design, and create a web site. Students will move past learning how to write code and progress to designing a professional looking web site using graphical authoring tools that contains multimedia elements. Working individually and in teams, students will learn to work with web page layout and graphical elements to create a professional looking web site. Various forms of technologies will be used to expose students to resources, software, and applications of web design. Professional communication skills and practices, problem-solving, ethical and legal issues, and the impact of effective presentation skills are enhanced in this course to prepare students to be college and career ready. Employability skills are integrated into activities, tasks, and projects throughout the course standards to demonstrate the skills required by business and industry. Competencies in the co-curricular student organization, Future Business Leaders of America (FBLA), are integral components of the employability skills standard for this course. Web Design is the third course in the Web & Digital Design pathway in the Information Technology cluster. Students enrolled in this course should have successfully completed Introduction to Digital Technology and Digital Design. After mastery of the standards in this course, students should be prepared to take the end of pathway assessment in this career area.

Pre-Requisite: Digital Design