COURSE CATALOG

WILLIAMSON COUNTY SCHOOLS CCTE

OUR GRADUATES SUCCEED IN BROADCASTING, DIGITAL ARTS, EDUCATION, ENGINEERING, HEALTHCARE, HOSPITALITY, INFORMATION TECHNOLOGY, LAW, MARKETING, MANUFACTURING AND ARE CHANGING THE WORKFORCE LANDSCAPE.

CONTENTS

BRENTWOOD

- TV & Film Production
- Business Management
- Coding
- Marketing/entrepreneurship
- STEM Research – Mechanical Engineering
- STEM Research – Chemical Engineering
- STEM Research – Biomedical Engineering

CENTENNIAL

- Architecture Engineering & Design
- TV & Film Production
- Teaching as a Profession
- Cosmetology
- Coding/Web Design & Mobile Technologies
- Criminal Justice- Law enforcement services
- Marketing Management
- Nursing

FAIRVIEW

- Mechatronics – Dual enrollment with Columbia state offered. Students could potentially graduate High school with an Associate's Degree
- Ag Program – Horticulture Science
- Structural Systems
- TV & Film Production
- Teaching as a Profession
- Emergency Services
- Sports & Human Performance

FRANKLIN

- Architecture Engineering & Design
- Digital Arts & Design
- TV & Film Production
- Early Childhood Education
- Culinary Arts
- Coding/Cybersecurity/Autonomous Vehicles
- Criminal Justice
- Marketing Management
- Diagnostic Services/Pre-med
- STEM Research – Mechanical Engineering
- STEM Research – Chemical Engineering
- Automotive and Collision Repair

INDEPENDENCE

- Architecture Engineering & Design
- Digital Arts & Design
- TV & Film Production
- Early Childhood Education Careers
- Sports Health & Nutrition
- Coding
- Criminal Justice – Law enforcement services
- Marketing Management
- Diagnostic Services/ Pre-Med
- Sports & Human Performance

NOLENSUILLE

- TV & Film Production
- Culinary Arts
- Marketing Management
- Nursing
- Sports & Human Performance
- Engineering & Unmanned Aerial Systems

PAGE

- Ag Program - Veterinary and Animal Science
- TV & Film Production
- Coding
- Marketing Management
- Diagnostic Services/ Pre-Med
- Emergency Services
- Nursing
- Engineering– Project Lead the Way

RAVENWOOD

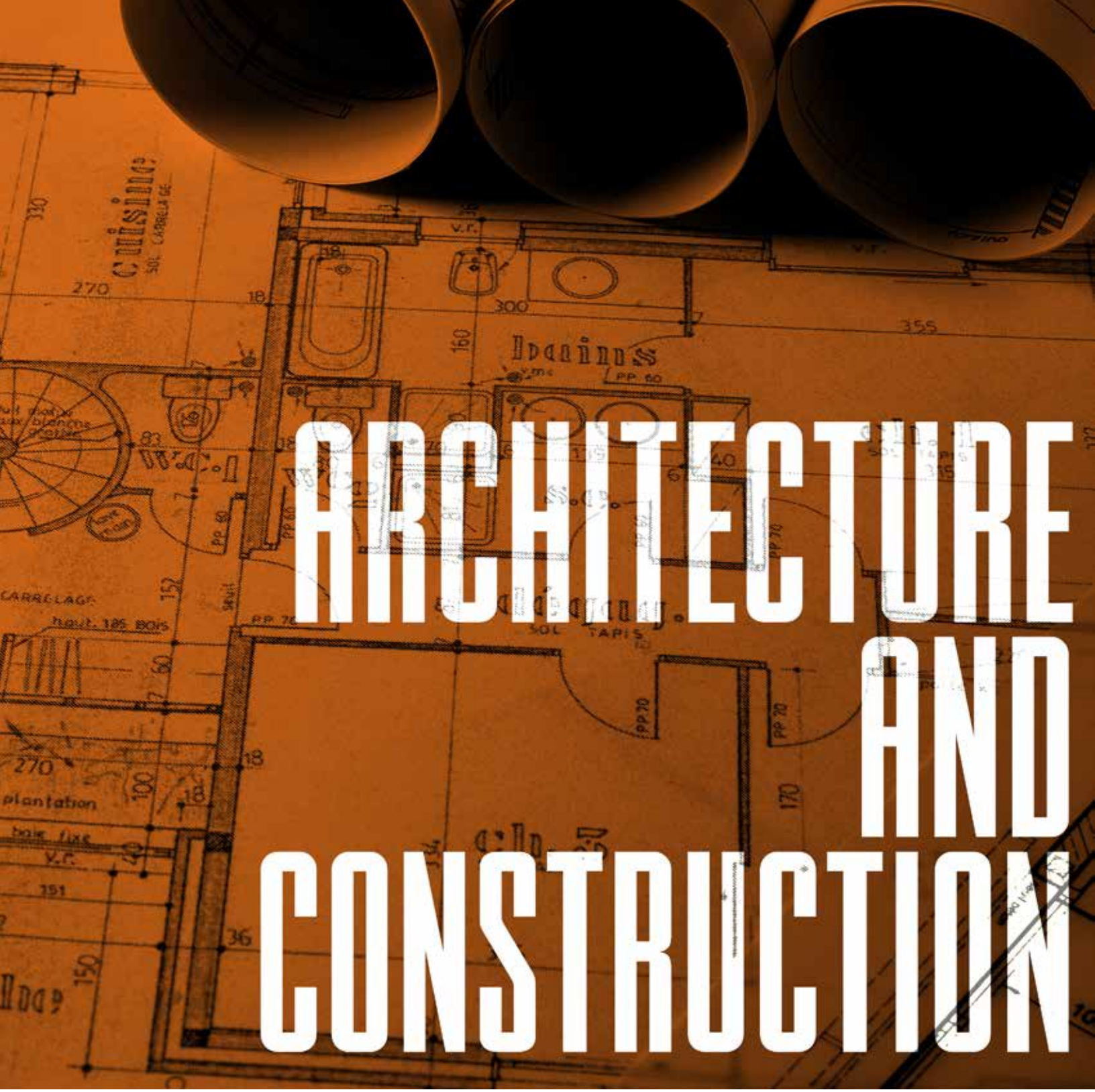
- Architecture Engineering & Design
- Digital Arts & Design
- TV & Film Production
- Accounting
- Criminal Justice – Law enforcement services
- Marketing
- Emergency Services
- Pre-Med/ Biomedical Science – Project Lead the Way
- Nursing

RENAISSANCE

- Digital Arts & Design
- Music & Audio Production
- Coding

SUMMIT

- Digital Arts & Design
- TV & Film Production
- Early Childhood Education Careers
- Culinary Arts
- Coding/ Cybersecurity
- Marketing Management
- Sports & Human Performance
- Engineering– Project Lead the Way



ARCHITECTURE AND CONSTRUCTION

HIGH SCHOOL DIPLOMA

- Surveying and mapping technicians, $38,891

CERTIFICATE

- Architectural and civil drafters, $46,147
- Electrical and electronics drafters, $52,412
- Mechanical drafters, $48,287

ASSOCIATE'S

- Mechanical engineering technicians, $51,770
- Civil engineering technicians, $49,920

BACHELOR'S

- Industrial engineers, $77,398
- Civil engineers, $86,719
- Mechanical engineers, $82,210

C17H13 Architectural & Engineering Design I

Architectural and Engineering Design I is a foundational course in the Architecture and Construction cluster for students interested in a variety of engineering and design professions. Upon completion of this course, proficient students will be able to create technical drawings of increasing complexity, and utilize these skills to complete the design process and communicate project outcomes. Students will build foundational skills in freehand sketching, fundamental technical drawing, and related measurement and math. Standards in this course also include career exploration within the technical design industry, as well as an overview of the history and impact of architecture and engineering. In addition, students will begin compiling artifacts for inclusion in a portfolio which they will carry with them throughout the full sequence of courses in this program of study.

Grade Level: 9-12 Prerequisite: None Teacher Recommendation Needed: Yes Minimum Credit: 1.0 Maximum Credit: 1.0 NCAA Approved: No

C17H14 Architectural & Engineering Design II

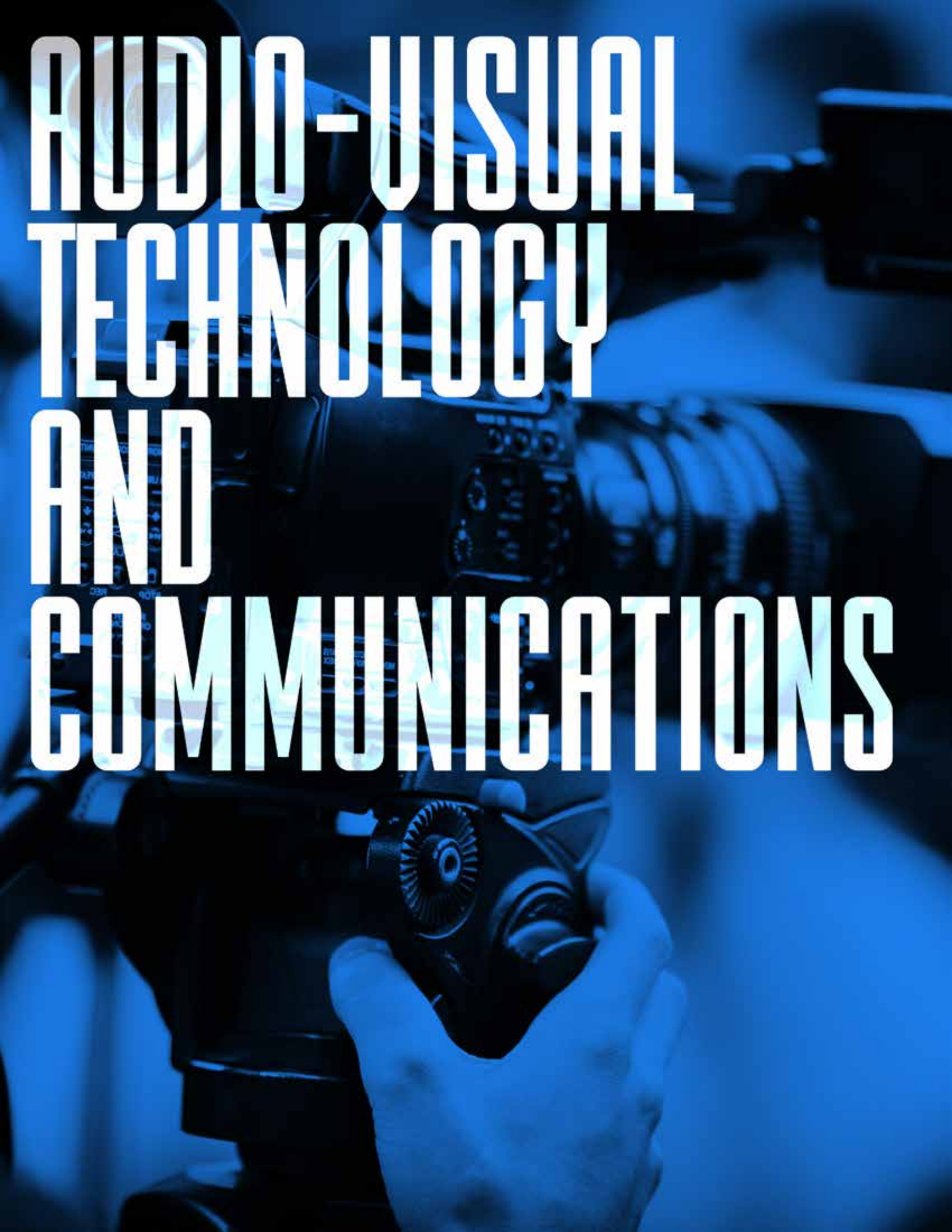
Architectural and Engineering Design II is the second course in the Architectural and Engineering Design program of study. Students in this course build their skills in developing and representing design ideas using technical drawing and modeling techniques and apply the design process to solve design problems. Upon completion of this course, proficient students will be able to use CAD software to create multi-view, sectional view, auxiliary view, and three-dimensional drawings using industry standard dimensioning and notation. Students will connect drawings with actual physical layouts by building models based on drawings, creating drawings based on objects and other physical layouts, and using software to create basic three-dimensional models. In addition, students will continue compiling artifacts for inclusion in a portfolio, which they will carry with them throughout the full sequence of courses in this program of study.

Grade Level: 10-12 Prerequisite: Architectural & Engineering Design II Teacher Recommendation Needed: No Minimum Credit: 1.0 Maximum Credit: 1.0 NCAA Approved: No

C17H10 Architectural & Engineering Design III

Architectural and Engineering Design III is the third course in the Architectural and Engineering Design program of study. In this advanced course, students will apply technical drawing and design skills developed in the previous courses to specific architectural and mechanical design projects and contexts. In the process, students will expand their problem-solving and critical-thinking skills by assessing the requirements of a project alongside the available resources in order to accomplish realistic planning. Upon completion of this course, proficient students will be able to employ methods of data collection and analysis to provide others with appropriate information for projects and to develop their own designs. Students will also be able to engage with industry-specific technology to create visual representations of project outcomes. In addition, students will continue compiling artifacts for inclusion in a portfolio, which they will carry with them throughout the full sequence of courses in this program of study.

Grade Level: 11-12 Prerequisite: Architectural & Engineering Design II Teacher Recommendation Needed: No Minimum Credit: 1.0 Maximum Credit: 2.0 NCAA Approved: No Dual Enrollment: MTSU



AUDIO-VISUAL TECHNOLOGY AND COMMUNICATIONS

C11H01 - Television and Film Production/AV Production I

Students learn to safely and appropriately produce professional programming for film, television, and news media; work in teams with professional cameras, audio, lighting and switching equipment; learn the editing software that is used to make movies, television shows, commercials, movie trailers and web programs; produce original programming and cover live events for county television and web- sites. A lab fee is requested.

Grade Level: 9-12 Prerequisite: None Teacher Recommendation Needed: No Minimum Credit: 1.0 Maximum Credit: 1.0 NCAA Approved: No

C11H02 - Television and Film Production/AV Production II

Students work with classmates to form a studio team that extends programming artistically and technically, work in self-directed teams to create and produce original content, build on knowledge and skills from Broadcasting I, produce original programming and cover live events for county television and websites. Potential opportunity exists to compete for summer internships in media production. A lab fee is requested.

Grade Level: 10-12 Prerequisite: Television and Film Production/AV Production I Teacher Recommendation Needed: No Minimum Credit: 1.0 Maximum Credit: 1.0 NCAA Approved: No

C11H03 - Television and Film Production/AV Production III

Students manage all aspects of the studio's workflow and its production teams. Lead "development through completion" of original programming and live event coverage for county television and websites, build on knowledge and skills from Broadcasting II, develop a portfolio and demo reel/ resume or educational or career opportunities. Potential opportunity exists to compete for summer intern- ships in media production. A lab fee is requested.

Grade Level: 11-12 Prerequisite: Television and Film Production/AV Production I and II Teacher Recommendation Needed: No Minimum Credit: 1.0 Maximum Credit: 2.0 NCAA Approved: No

HIGH SCHOOL DIPLOMA

- Public Address Announcers, $18,132
- Camera Operators, $44,228

CERTIFICATE

- Audio and video equipment technicians, $35,341
- Sound engineering technicians, $49,904

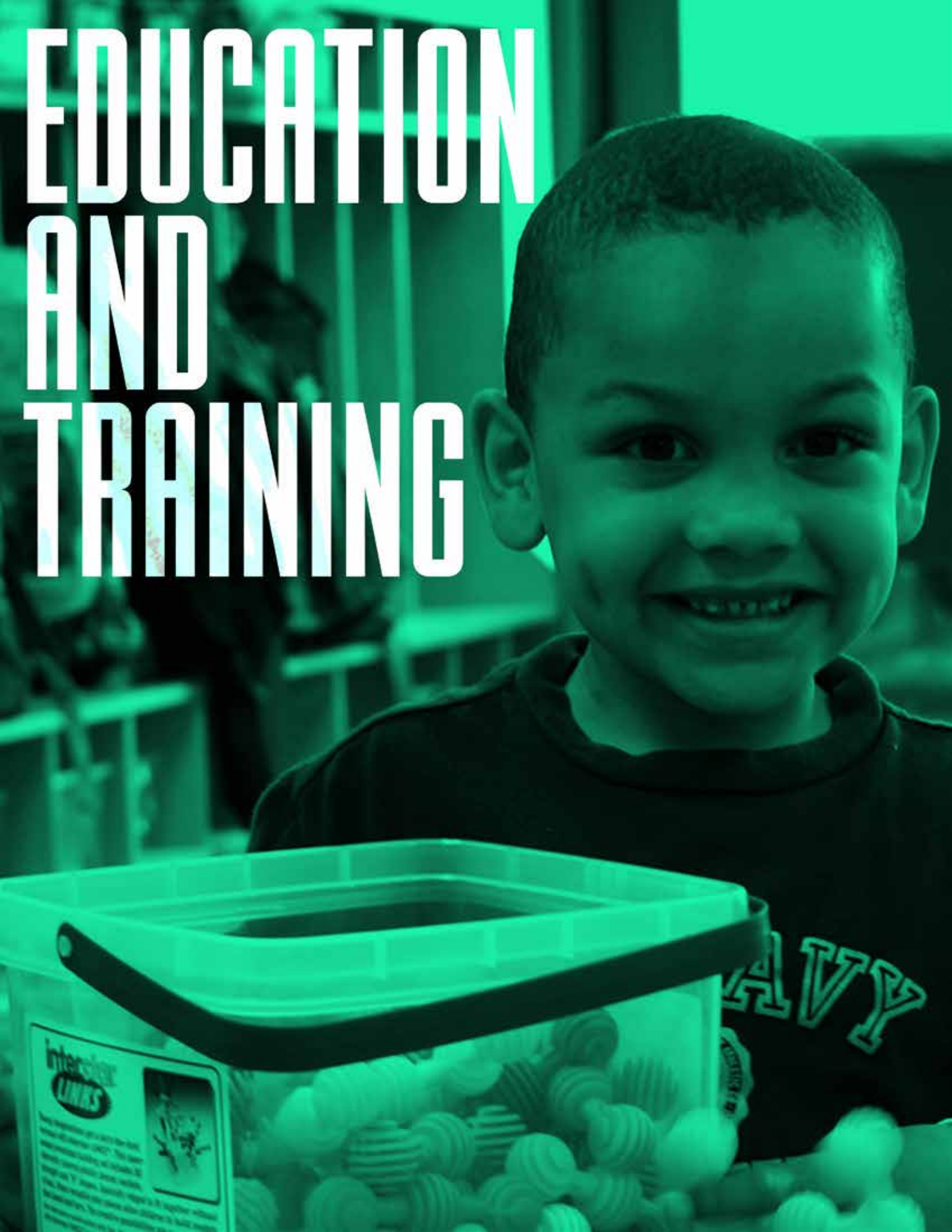
ASSOCIATE'S

- Broadcast technicians, $36,891

BACHELOR'S

- Producers and Directors, $44,358
- Editors, $45,242
- Film and Video Editors, $59,290

EDUCATION AND TRAINING



C25H05 Fundamentals of Education

Fundamentals of Education is a foundational course in the Education and Training career cluster for students interested in learning more about becoming a school counselor, teacher, librarian, or speech language pathologist. This course covers the history of education in the United States, careers in education, and the influence of human development on learning. Artifacts will be created for inclusion in a portfolio, which will continue throughout the full sequence of courses.

Grade Level: 9-12 Prerequisite: None Teacher Recommendation Needed: No Minimum Credit: 1.0 Maximum Credit: 1.0 NCAA Approved: No

C25H06 Teaching as a Profession II

Teaching as a Profession II (TAP II) is an applied knowledge course for students interested in learn- ing more about becoming a teacher, school counselor, librarian, or speech-language pathologist. This course covers classroom management, concepts of higher order thinking, differentiating instruction, and strategies of effective classroom planning. Students in this course will demonstrate their skills in laboratory settings while building a course portfolio of work.

Grade Level: 11-12 Prerequisite: Fundamentals of Education or Early Childhood Education I or Teaching as a Profession I Teacher Recommendation Needed: No Minimum Credit: 1.0 Maximum Credit: 1.0 NCAA Approved: No

HIGH SCHOOL DIPLOMA

- Teacher Assistants, $19,493

CERTIFICATE

- Preschool Teachers, $24,770
- Childcare Worker, $18,530

BACHELOR'S

- Elementary School Teachers, $46,344
- Kindergarten Teachers, $46,160
- Middle School Teachers, $46,573
- Secondary School Teachers, $47,778
- Career and Technical Education Teachers, $46,240
- Special Education Teachers, $59,629

HOSPITALITY AND TOURISM

HIGH SCHOOL DIPLOMA

Cooks, Cafeteria or Institution, $21.890
First-line Supervisor of Food Prep, $27,580
Food Preparation Worker, $19,580

CERTIFICATE

- Cook, $22,530

ASSOCIATE'S

- Head Chef or Cook, $28,720

BACHELOR'S

- Culinary Arts Management, $50,877
- Culinary Instructor, $52,466

C16H06 Culinary Arts I

Culinary Arts I is an introductory program of study designed to provide students with a fundamental knowledge of professional food service. Objectives focus on safety and sanitation competencies, manual knife skills, quantity food preparation and storage requirements, weights, measures, conver- sions, nutrition, menu planning, business math, controlling food costs and workability skills. Additionally, students will gain experience working in a professional kitchen environment while preparing a variety of food products. As students learn about the principles of baking and rudimental cooking techniques, application of cooking methods will be practiced while preparing baked goods and fundamental recipes that include, but are not limited to: biscuits, quick breads, cookies, pour batters, pies, breakfast foods, sandwiches, salads and salad dressings, garnishing, fruits and vegetables.

Grade Level: 9-12 Prerequisite: None Teacher Recommendation Needed: No Minimum Credit: 1.0 Maximum Credit: 1.0 NCAA Approved: No

C16H07 Culinary Arts II

Culinary Arts II is a 2-hour course that is an extension of Culinary Arts I, and students will continue to follow guidelines and apply skills as they relate to standards set by the foodservice industry. As students explore the culinary history, food service trends, the art of service, hospitality, lodging and tourism industries, menu design, marketing, purchasing, inventory control, basic accounting practices and cuisines of the world. Students will prepare a full range of menu items that include potatoes and grains, meat, poultry, seafood, stocks, soups, sauces and advanced desserts. Notably, there will be an ongoing emphasis on health department safety and sanitation guidelines, equipment identification and usage and successful preparation of numerous menu items in the in-school restaurant as well as school-based catered events. A culinary arts portfolio will be required while in Culinary Arts II and the opportunity to apply for a competitive internship will be one important aspect of this program of study. Internships may be paid or unpaid.

Grade Level: 10-12 Prerequisite: Culinary Arts I Teacher Recommendation Needed: No Minimum Credit: 1.0 Maximum Credit: 2.0 NCAA Approved: No

C16H08 Culinary Arts III

Culinary Arts III is the third level of Culinary Arts and it serves as a capstone course. It, too, prepares students for gainful employment and/or entry into post-secondary education in the food production and service industry. Content provides students the opportunity to apply the marketable culinary arts skills that they have acquired by assuming increasingly responsible positions, including participation in the school's in-house restaurant and local cooperative education internships.

Grade Level: 11-12 Prerequisite: Culinary Arts I and IITeacher Recommendation Needed: No Minimum Credit: 1.0 Maximum Credit: 2.0 NCAA Approved: No


HUMAN
SERVICES

C19H12 Cosmetology I

The first level of cosmetology, and it prepares students with work-related skills for advancement into the Design Principles of Cosmetology course. Content provides students the opportunity to acquire basic fundamental skills in both theory and practical applications of leadership and interpersonal skill development. Content stresses safety, environmental issues, and protection of the public and designers as integrated with principles of hair design, nail structure, and cosmetic procedures. Laboratory facilities and experiences simulate those found in the cosmetology industry.

Grade Level: 10-12 Prerequisite: None Teacher Recommendation Needed: No Minimum Credit: 1.0 Maximum Credit: 1.0 NCAA Approved: No

C19H14 Cosmetology II

The second level of cosmetology and prepares students for work-related skills and advancement into the Chemistry of Cosmetology course. Content provides students the opportunity to acquire knowledge and skills in both theory and practical application. Advanced knowledge and skills in hair design, nail artistry, and cosmetic applications will be enhanced in a laboratory setting, which duplicates cosmetology industry standards. Upon completion and acquisition of 300 hours, students are eligible to take the Tennessee Board of Cosmetology Shampoo examination for a Tennessee Shampoo Technician License.

Grade Level: 11-12 Prerequisite: Cosmetology I Teacher Recommendation Needed: No Minimum Credit: 1.0 Maximum Credit: 2.0 NCAA Approved: No

C19H13 Cosmetology III

Chemistry of Cosmetology is the advanced level of cosmetology, and it prepares students to perform work-related services using chemicals in the cosmetology industry. Content provides students the opportunity to acquire foundation skills in both theory and practical applications. Laboratory facilities and experiences will be used to simulate cosmetology work experiences. Students completing this portion of the course of cosmetology will acquire the necessary hours to transfer to a post-secondary course of study to complete the hours needed to be eligible to take the Tennessee State Board of Cosmetology examination for the Tennessee Cosmetology License. Upon completion and acquisition of 300 hours, students are eligible to take the Tennessee State Board of Cosmetology Shampooing examination for a Shampooing Technician license.

Grade Level: 10-11 Prerequisite: Cosmetology II Teacher Recommendation Needed: No Minimum Credit: 1.0 Maximum Credit: 1.0 NCAA Approved: No

CERTIFICATE

- Skin Care Specialist, $33,882
- Cosmetologist, $23,630-$48,590
- Manicurist & Pedicurists, $21,680-$43,130
- Master Barber, $21,040-$34,430

BACHELOR'S

- Instructor, $47,778

INFORMATION TECHNOLOGY

HIGH SCHOOL DIPLOMA
- Desktop Publisher, $44,520

CERTIFICATE
- Web Developer, $55,800

ASSOCIATE'S
- Web Administration, $72,220

BACHELOR'S
- Computer Programmer, $70,050

C10H14 Coding I

Coding I is a course in which students will develop skills in problem analysis, construction of algorithms, and computer implementation of algorithms as they work on programming projects of increasing complexity. The recommended programming environment is DrScheme, as it permits an emphasis on development of analytic skills rather than any particular language syntax or vocabulary. Emphasis is on actual programming projects, both individual and group. Course content should be repeatedly applied to increasingly complex projects.

Grade Level: 9-12 Prerequisite: No Teacher Recommendation Needed: No Minimum Credit: 1.0 Maximum Credit: 1.0 NCAA Approved: No

C10H16 Web Foundations

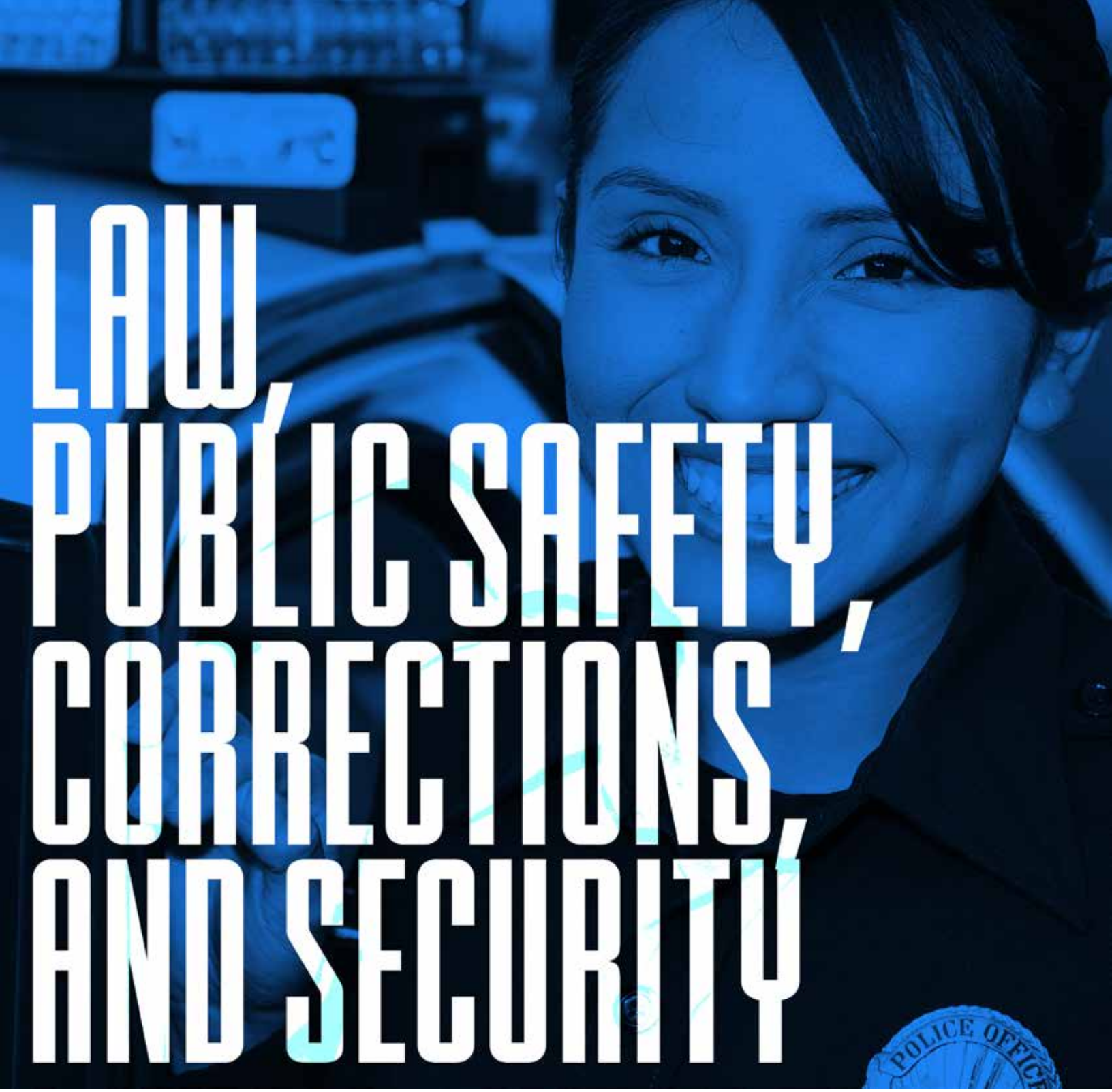
Web Foundations is a course that prepares students with work-related web design skills for advancement into postsecondary education and industry. The course is intended to develop fundamental skills in both theory and practical application of the basic web design and development process, project management and teamwork, troubleshooting and problem solving, and interpersonal skill development. Laboratory facilities and experiences simulate those found in the web design and development industry; where interaction with a "client" is indicated in the standards, it is expected that students' peer clients or the instructor may serve as mock clients in lieu of an actual relationship with an industry partner. Upon completion of this course, proficient students will be prepared for more advanced coursework in the Web Design program of study.

Grade Level: 9-12 Prerequisite: No Teacher Recommendation Needed: No Minimum Credit: 1.0 Maximum Credit: 1.0 NCAA Approved: No

C10H17 Website Development

Web Site Development builds on the skills and knowledge gained in Web Design Foundations to further prepare students for success in the web design and development fields. Emphasis is placed on applying the design process toward projects of increasing sophistication, culminating in the production of a functional, static website. As students work toward this goal, they acquire key skills in coding, project management, basic troubleshooting and validation, and content development and analysis. Artifacts of the work completed in this course will be logged in a student portfolio demonstrating mastery of skills and knowledge. Upon completion of this course, proficient students will be prepared to pursue a variety of postsecondary programs in the computer sciences, sit for industry certification, or apply their skills in a capstone Web Design Practicum.

Grade Level: 11-12 Prerequisite: Web Design Foundations Teacher Recommendation Needed: No Minimum Credit: 1.0 Maximum Credit: 1.0 NCAA Approved: No



LAW, PUBLIC SAFETY, CORRECTIONS, AND SECURITY

HIGH SCHOOL DIPLOMA

- Police, Fire, Ambulance dispatcher, $24,330-$40,160
- Correctional Officers and Jailers, $24,000

CERTIFICATE

- Patrol Officer, $31,240-$50,100

ASSOCIATE'S

- Criminal Justice teacher ($35,820-$86,570) with transitional teaching license

BACHELOR'S

- Probation officer ($27,040-$51,030)
- Emergency Management Director ($38,730-$149,130)

C15H10 Criminal Justice I

This course is designed to give the student an overview of the United States Criminal Justice System through the examination of U.S. law enforcement agencies, the U.S. Court systems and U.S. Correctional Institutions. The first year emphasis is given to the history of law enforcement; current issues facing law enforcement; the study of U.S. Constitutional law and criminal law. This course will examine career paths within the legal field. The curriculum is complimented with various guest speakers from the Criminal Justice Field and potential field trips to a local police department and training academy, county jail and Juvenile Court. Students will prepare a Pre-Law and Law Enforcement Service portfolio to be maintained through their three year course of study.

Grade Level: 9-12 Prerequisite: No Teacher Recommendation Needed: No Minimum Credit: 1.0 Maximum Credit: 1.0 NCAA Approved: No

C15H11 Criminal Justice II

This course is a continuation of the exploration of the knowledge obtained in Criminal Justice I with an emphasis on the U.S. and Tennessee Court Systems. This course provides a hands-on study of law enforcement operations including investigative procedures, finger printing and crime scene searches culminating in mock court trials conducted by the students. Students will evaluate emerging technology and its impact on the criminal justice system. After evaluating legal opinions from the U.S. Supreme Court and the Tennessee Appellate Courts, students will utilize their knowledge to predict results in future cases. Students are also given the opportunity to sit as Jurors in Mock Trials held at Vanderbilt School of Law. Field trips include at least two of the following: a Tennessee Maximum Security Institution, observation of criminal court proceedings and Vanderbilt Law School campus. Students shall maintain and build upon their Pre-Law and Law Enforcement Services Portfolio. Students will also have the opportunity to compete for a summer internship supported by the Williamson County Criminal Justice Advisory Committee.

Grade Level: 10-12 Prerequisite: Criminal Justice I Teacher Recommendation Needed: No Minimum Credit: 1.0 Maximum Credit: 1.0 NCAA Approved: No

C15H12 Criminal Justice III

This course will provide students with an opportunity to explore the basic processes and principles of criminology (the theories behind what makes a person become a criminal) with an emphasis on criminal profiling. CJ III also explores the basic principles of forensic science as it relates to criminal investigation. Students will learn the importance of the identification, collection, and processing of evidence and of its contribution to the criminal investigation. Students will learn of the legal responsibilities and challenges which the forensic investigator may encounter from initial response to the court room. The course also explores the various careers available within the three major components of the criminal justice system-law enforcement, the judicial system and corrections. Potential student work projects shall include a research project, book report and presentation.

Grade Level: 11-12 Prerequisite: Criminal Justice II Teacher Recommendation Needed: No Minimum Credit: 1.0 Maximum Credit: 1.0 NCAA Approved: No

MARKETING

CERTIFICATE

- Retail Salesperson, $20,984

ASSOCIATE'S

- Meeting/Event Planner, $37,135
- Supervisor of Retail Salespersons $35,950

BACHELOR'S

- Marketing Specialist $49,739
- Sales Manager $81,495
- Advertising/Promotions Manager $59,517
- Marketing Manager $86,035

C12H29M Marketing I

Marketing and Management Principles I focuses on the study of marketing concepts and their practical application. Students will examine risks and challenges marketers face to establish a competitive edge. Subject matter includes economics, marketing foundations/functions and human resource leadership development. Skills in communication, mathematics, economics, and psychology are reinforced in this course. DECA membership is required. Seniors who wish to co-op must have a good school behavior record, attendance record, passing grades, teacher recommendations, and a marketing career objective. One credit in Marketing and Managing Principles I substitutes for the student's Economics requirement.

Grade Level: 9-12 Prerequisite: No Teacher Recommendation Needed: No Minimum Credit: 1.0 Maximum Credit: 1.0 NCAA Approved: No

C12H30M Marketing II

This course is a study of marketing concepts and principles used in management. Students will examine challenges, responsibilities and risks managers face in today's workplace. Subject matter includes finance, entrepreneurship, risk management, marketing information systems, purchasing, human resource skills, and leadership development.

Grade Level: 10-12 Prerequisite: Marketing I Teacher Recommendation Needed: No Minimum Credit: 1.0 Maximum Credit: 1.0 NCAA Approved: No

C12H31M Entrepreneurship

The course will include enhanced marketing information as it relates to entrepreneurial activities. Subject matter will include introductory entrepreneurial concepts, business plan development, management responsibilities, and legal and ethical issues of business ownership. Students in this class manage and operate the school store as an integral portion of their grade for the course. Co-op is an option for seniors with required summer workshop. Entrepreneurship students may join DECA.

Grade Level: 11-12 Prerequisite: Marketing II Teacher Recommendation Needed: No Minimum Credit: 1.0 Maximum Credit: 1.0 NCAA Approved: No

C16H12A Event Planning Management

Event Planning and Management is designed to be a project-based, capstone experience in which students research, prepare, deliver, and reflect upon an original event for a community organization, business, or non-profit. Upon completion of this course, proficient students will further refine leadership, teamwork, and management skills acquired in previous courses and apply them through application in a practicum setting. The course is highly customizable to meet local needs: partner organizations may be chosen at the discretion of student teams, with the approval of the instructor and appropriate school personnel. Organizations can include local non-profits, charities, shelters, agencies, businesses, sports teams, school-based enterprises, or other entities with a demonstrated need for assistance in staging an event or a commitment to providing students with work-based learning opportunities.

Grade Level: 11-12 Prerequisite: Marketing II Teacher Recommendation Needed: No Minimum Credit: 1.0 Maximum Credit: 1.0 NCAA Approved: No

MEDICAL SCIENCE

C14H14 Health Science Education

Health Science Education introduces students to health careers, career success, safety measures, growth and development, body systems, basic anatomy and physiology, CPR/first aid, and environmental and community health. This overview is designed to help students look at health care from a provider perspective and to help students choose a specific area of focus. This course serves as a foundation for all health science courses.

Grade Level: 9-12 Prerequisite: No Teacher Recommendation Needed: No Minimum Credit: 1.0 Maximum Credit: 1.0 NCAA Approved: No

C14H16 Medical Therapeutics Honors

In Medical Therapeutics students will evaluate the ways therapeutic medicine is used to focus on direct patient care. This could include nursing, medicine, dentistry, psychotherapy, and other allied health careers. Students learn to monitor and care for client status by learning CPR, first aid, basic pharmacology and additional care skills.

Grade Level: 10-12 Prerequisite: Health Science Education Teacher Recommendation Needed: No Minimum Credit: 1.0 Maximum Credit: 1.0 NCAA Approved: No

C14H16 Nursing Education Honors

This course consists of eighteen units of study dealing with direct bedside nursing care. Clinical experience will consist of supervised practice in the nursing home as well as demonstrations in the classroom. Students can be registered by the Tennessee Department of Health after the completion of the course, 100 hours clinical and theory, passing a state test, and will be job ready. This course is also offered for honors credit, which includes four individual assignments and compilation of a port-folio for deeper investigation and reflection. Nursing is a competitive senior level class limited to 15 students. Criteria used to select students are based on: number of health science courses a student has taken, absences and tardies, GPA and teacher recommendations.

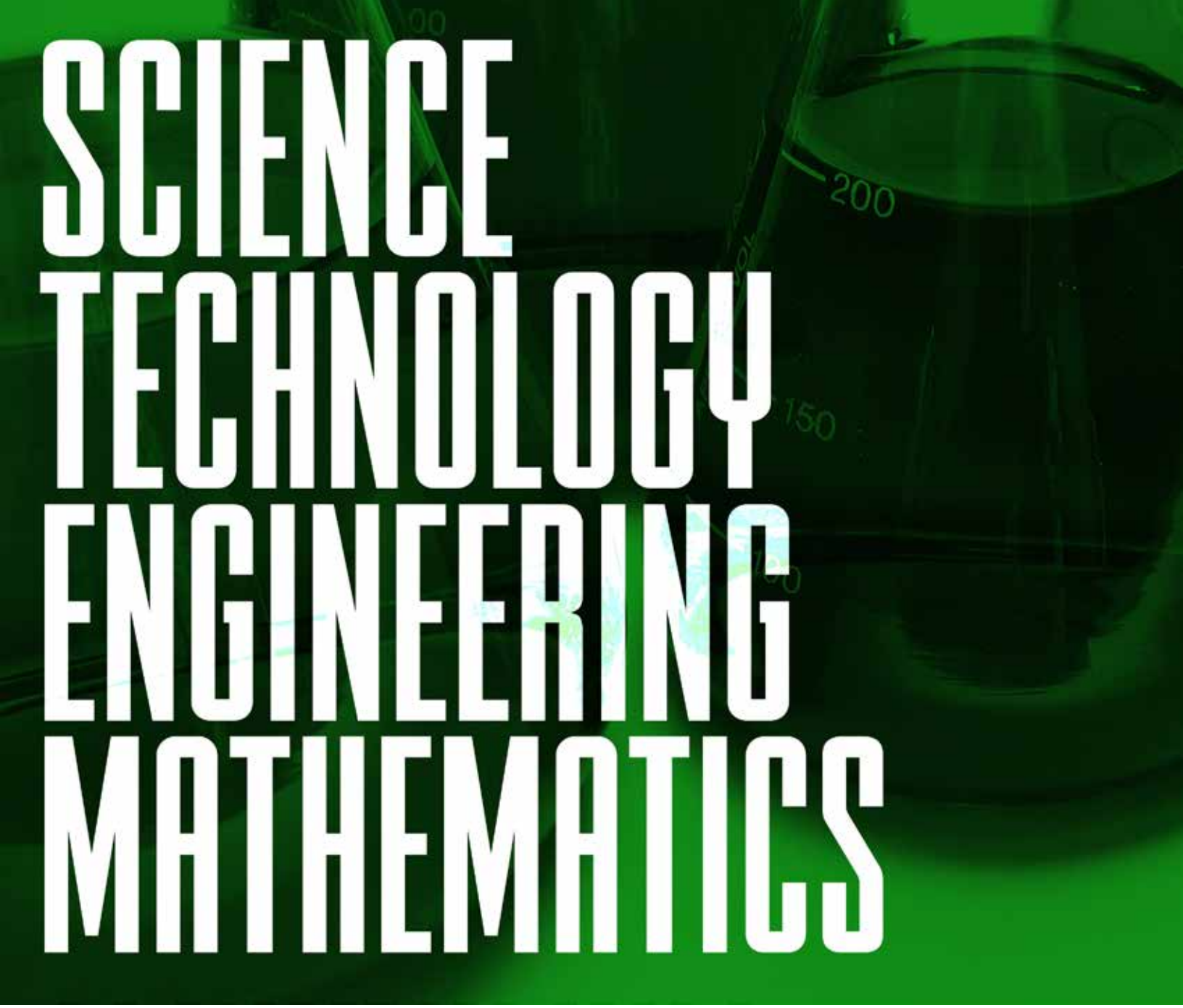
Grade Level: 10-12 Prerequisite: Health Science Education and Medical Therapeautics Honors Teacher Recommendation Needed: Yes Minimum Credit: 1.0 Maximum Credit: 1.0 NCAA Approved: No

HIGH SCHOOL DIPLOMA
- Dietetic Technician ($17,210-$29,000)

CERTIFICATE
- Nursing Assistant($24,420)
- Pharmacy Technician ($22,450-$34,050)
- Medical Assistant ($23,650-33,920)

ASSOCIATE'S
- Community Health Worker $21,990-$44,850
- Occupational Safety and Health Technician $63,020

BACHELOR'S
- Health Educators ($22,160-$45,540)
- Occupational Health and Safety Specialists ($46,200-$83,800)
- Registered Nurse ($65,470)



C03H18 Honors STEM Research

Honors STEM Research is a capstone course intended to provide students with the opportunity to apply the skills and knowledge learned in previous STEM Education courses within a professional, working environment. In addition to developing an understanding of the professional and ethical issues encountered by STEM professionals in the workplace, students learn to refine their skills in problem solving, research, communication, data analysis, teamwork, and project management. The course is highly customizable to meet local system needs: instruction may be delivered through school laboratory training or through work-based learning arrangements such as internships, cooperative education, service learning, mentoring, and job shadowing. Upon completion of this course, proficient students will be prepared for postsecondary study in a STEM field.

Grade Level: 11-12 Prerequisite: AP Biology or Anatomy and Physiology or AP Physics or AP Chemistry or AP Environmental Science or Honors Engineering through Service Learning Teacher Recommendation Needed: Yes Minimum Credit: 1.0 Maximum Credit: 1.0 NCAA Approved: No

C10H14 Coding I

Coding I is a course in which students will develop skills in problem analysis, construction of algorithms, and computer implementation of algorithms as they work on programming projects of increasing complexity. The recommended programming environment is DrScheme, as it permits an emphasis on development of analytic skills rather than any particular language syntax or vocabulary. Emphasis is on actual programming projects, both individual and group. Course content should be repeatedly applied to increasingly complex projects.

Grade Level: 9-12 Prerequisite: No Teacher Recommendation Needed: No Minimum Credit: 1.0 Maximum Credit: 1.0 NCAA Approved: No

C03H06 Engineering through Service Learning/Engineering Design Honors

In this course, engineering scope, content and professional practices are presented through practical application. Students in engineering teams apply technology, science, and mathematics concepts and skills to solve engineering design problems and project-based learning. Students research, develop, test, and analyze engineering designs using criteria such as design effectiveness, public safety, human factors, and ethics. This course will maintain a focus on how engineers apply their creativity, resourcefulness, mathematical, scientific, and technical knowledge and skills in the creation or refinement of technological products/systems. A key approach will be the employment of a sophisticated, sequential, and iterative design and development process to solve authentic engineering tasks/problems using Project-based Learning. Students will be challenged to participate as members of engineering teams within a typical business organization. Independent and group work will be reflectiveof authentic engineering projects found in the design world. Student performance within this structure will be assessed in numerous and diverse ways. It is important to note that measurement of student performance will be reflective of actual professional engineering evaluative processes currently used in this career field. Both independent and collaborative work will be carefully analyzed as students perform within an authentic engineering enterprise environment. The following major topics or chapters will be included to organize instruction of appropriate standards and benchmarks and reflect contemporary engineering industry practices. Principles of Design, Engineering Resources, Engineering Design Process, Project Management This course is an extremely rigorous capstone course that will include mostly high school junior and seniors who do intend to continue their education in Sciences, technology, engineering, or mathematics (STEM) at the post-secondary level, especially a four-five year baccalaureate degree.

Grade Level: 11-12 Prerequisite: Yes Teacher Recommendation Needed: No Minimum Credit: 1.0 Maximum Credit: 1.0 NCAA Approved: No

CERTIFICATE

- Computer User Support Specialist ($45,500)
- Geographic Information Systems Technician ($42,010)

ASSOCIATE'S

- Electrical Engineering Technician ($54,600)
- Geographic Information Technologist ($72,220)

BACHELOR'S

- Software Quality Assurance Engineer ($72,220)
- Software Developer ($82,740)
- Mechanical Engineer ($85,500)
- Electrical Engineer ($86,130)

TRANSPORTATION DISTRIBUTION AND LOGISTICS

C20H20 Introduction to Collision Repair

Introduction to Collision Repair is a foundational course in the Collision Repair program of study for students interested in learning more about automotive collision repair technician careers. Upon completion of this course, proficient students will be able to identify and explain the basic steps in the collisionrepair process, emphasizing the tools, equipment, and materials used. They are able to describe the major parts of an automobile body. They will be able to safely perform basic procedures in preparing automotive panels for repair,applying body filling, and preparing surfaces for painting. Standards in this course include career investigation of theopportunities in automotive collision repair as well as an overview of the history of automobile design and construction. Standards in this course are aligned with Tennessee State Standards for English Language Arts & Literacy in TechnicalSubjects, Tennessee State Standards in Mathematics, and to the National Automotive Technicians EducationFoundation (NATEF) standards, a national framework of industry-benchmarked standards.* Students completing the Collision Repair program of study will be eligible to take the examination for Automotive Student Excellence (ASE) Student Certification in Collision Repair. Some tasks are assigned a "High Priority (HP)" designation. NATEF accreditedprograms must include at least 95% of the HP-I (Individual) tasks and 90% of the HP-G (Group) tasks in the curriculum.

Grade Level: 9 Prerequisite: No Teacher Recommendation Needed: No Minimum Credit: 1.0 Maximum Credit: 1.0 NCAA Approved: No

C20H13 Collision Repair: Non-Structural

Collision Repair: Non-Structural is a course that prepares students to analyze non-structural collision damage to a vehicle, determine the extent of the damage and the direction of impact,initiate an appropriate repair plan, and correctly use equipment to fit metal to a specified dimension within tolerances. Course content includes metal finishing, body filling, and glass panel replacements. The course prepares students for entry level employment and advanced training in collision repair technology, and post-secondary education. Students completing the Collision Repair: Non-Structural are eligible to take the ASE written examination for Non-Structural Analysis and Damage Repair.

Grade Level: 10-12 Prerequisite: Introduction to Collision Repair Teacher Recommendation Needed: No Minimum Credit: 1.0 Maximum Credit: 2.0 NCAA Approved: No

C20H14 Collision Repair: Painting and Refinishing

Painting and Refinishing is a course that prepares students to use plastics and adhesives in the repair and refinish processes and to apply automotive paint to a vehicle. Students learn to diagnose automotive paint finish problems and to perform the appropriate manufacturer-required techniques and processes to refinish the affected area or the complete vehicle. Course content provides the student with training 81 in mixing, matching, and applying paint and finish to vehicles. Course content includes the application of plastics andadhesives in the repair and refinish processes. The course prepares students for entry level employment and advancedtraining in collision repair technology, and post-secondary education. Students completing Painting and Refinishing are eligible to take the ASE written examination for Painting and Refinishing.

Grade Level: 11-12 Prerequisite: Introduction to Collision Repair Teacher Recommendation Needed: No Minimum Credit: 1.0 Maximum Credit: 2.0 NCAA Approved: No

C20H19 Collision Repair: Damage Analysis, Estimating, and Customer Service

This is the capstone course in the Collision Repair program of study. It is intended to prepare students for careers in the automotive repair industry. Upon completion of this course, a student proficient in Damage Analysis, Estimating, and Customer Service will be able to assess collision damage, estimate repair costs, and work with vehicle owners in a professional setting. Utilizing problem-solving strategies and resources developed in this course, including original equipment manufacturer (OEM) manuals, electronic data, and photo analysis of damaged vehicles, students will be prepared to generate work orders in a variety of collision damage situations. Standards in this course are aligned with Tennessee Common Core State Standards for English Language Arts & Literacy in Technical Subjects and to the National Automotive Technicians Education Foundation (NATEF) standards, a national framework of industry-benchmarked standards.* Students completing the Collision Repair program of study will be eligible to take the examination for Automotive Student Excellence (ASE) Student Certification in Collision. Some tasks are assigned a “High Priority (HP)” designation. Accredited programs must include at least 95% of the HP-I (Individual) tasks and 90% of the HP-G (Group) tasks in the curriculum.

Grade Level: 12 Prerequisite: Collision Repair: Non-Structural and Collision Repair: Painting and Refinishing Teacher Recommendation Needed: No Minimum Credit: 1.0 Maximum Credit: 1.0 NCAA Approved: No

HIGH SCHOOL DIPLOMA
- Automotive body and related repairers, $38,590
- Automotive glass installers and repairers, $37,500

CERTIFICATE
- Automotive body and related repairers, $38,590
- Mobile heavy equipment mechanics, $39,410

ASSOCIATE'S
- Mechanical engineering technicians, $51,770
- Automotive body and related repairers, $38,590

BACHELOR'S
- Mechanical engineers, $82,210

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