## Wyoming County Schools

# Program of Study <br> Grades 9-12, <br> 2024-2025 



March 4, 2024
Wyoming County Schools

## Program of Study

## Grades 9-12

## Student Handbook

The basis of this Student Handbook is derived from the requirements of West Virginia State Board of Education Policy 2510. Revisions to this handbook are dictated by revisions to Policy 2510. The complete policy can be accessed at the following website: http://wvde.state.wv.us/policies.

Descriptions for courses offered at Westside High School, Wyoming East High School, and the Wyoming County Career and Technical Center can be found on the Wyoming County Board of Education website at: http://boe.wyom.k12.wv.us/.

24 credits are required for graduation for Class of 2022 and beyond.

## Important Notes

Course offering capabilities are dictated by student requests and available staff. Not all courses listed in this book can be offered every year!

Students and Parents are urged to consult administrators, counselors, and/or advisers with any questions regarding available course options.

If a student is planning to participate in college athletics, please be advised that the NCAA may not accept Financial Algebra as a student's third math requirement. The NCAA may not accept Transitional English, Transitional Math, embedded English, or embedded math as a student's fourth English or math requirement. A student must take a higher level math in grade 11 and a higher level math and/or English in grade 12 to satisfy NCAA requirements. Please consult with your counselor.

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## Important Terms

Advanced Careers (AC)

Advanced Placement (AP)

## Capstone

Career Cluster

## Concentration Classes

## Dual Credit

## Early College Academy

Curricula that blends learning experiences that advance students' literacy, math, science, and technical knowledge and skills, and that strengthen the habits and behavior and mind for success.

High school courses that offer college credit if student receives a passing score on AP exam. All AP students must take the AP Exam. AP Exams will be at the expense of the WCBOE.

A multifaceted assignment that serves as a Culminating academic and intellectual experience for students. A long-term investigative project that culminates in a final product, presentation, or performance. Students will maintain a portfolio and be required to do an oral presentation. Capstone projects are generally designed to encourage students to think critically, solve challenging problems, and develop skills such as oral communication, public speaking, research skills, media literacy, teamwork, planning, self-sufficiency, or goal setting which are all skills that will help prepare them for college, modern careers, and adult life.

A wide grouping of related occupations representative of types of occupations available in the world of work. Career Clusters identify the knowledge and skills Needed to follow a pathway toward career goals and provide a content for exploring the many occupational options available. Wyoming County has identified 16 national career clusters. Students will choose an occupational cluster on their PEP.

Concentration classes are four classes that a student Takes based upon their selected Career Cluster. Students must complete the four concentration classes in their chosen pathway as a requirement for graduation.

Dual credit is a program that allows high school students to enroll in college courses for credit prior to high school graduation. College credits earned through dual credit can be applied toward high school and college graduation.

## A program for eligible high school students to participate in college courses online through Southern Community and Technical College, Logan Campus.

| E.D.G.E. | (Earn a Degree, Graduate Early) A WV Higher <br> Education Tech Prep program that allows students to <br> take high school courses for community and technical <br> college credit. The courses are connected to the <br> skilled pathway in the career cluster. Most courses at <br> the Career and Technical Center are EDGE courses. |
| :--- | :--- |
| Embedded Credit | The approved content standards and objectives for a <br> credit bearing high school course that are embedded |
| within a second course or two courses to receive |  |
| credit for both courses. Embedded credit does not |  |
| allow for two courses in the same content area to be |  |
| embedded into one course. |  |

S.T.E.M.

## S.T.E.A.M.

STEM is an acronym for Science, Technology, Engineering, and Mathematics education. These four areas are focused on together not only because the skills and knowledge in each discipline are essential for student success, but also because these fields are deeply intertwined in the real world and in how students learn most effectively.

STEAM is an acronym for Science, Technology, Engineering, Arts, and Mathematics education.

## Foundations for High-Quality Developmentally Appropriate High School Programming

Courses needed for graduation require mastery of approved content standards. Students should consult their chosen post-secondary educational/training institution when choosing course options and electives. Each student's coursework will be designed to lead directly to placement in entry-level, credit-bearing academic college courses, completion of an industry-recognized certificate or license, a workplace training program, or job placement. (WVDE Policy 2510)

## Class of 2022 and beyond

| 24 total credits required-- | 12 Prescribed 10 Personalized 2 Electives |
| :---: | :---: |
| English Language Arts (ELA)-4 credits | 3 prescribed/1 personalized |
| Mathematics-4 credits | 2 prescribed/2 personalized |
| Science-3 credits | 2 prescribed/1 personalized |
| Social Studies-4 credits | 3 prescribed/1 personalized |
| Physical Education-1 credit | 1 prescribed |
| Health-1 credit | 1 prescribed |
| The Arts-1 credit | 1 personalized |
| Personal Finance-1 credit | 1 prescribed per state code §18-2-7c** |
| Personalized Education Plan-4 credits | 4 personalized core concentration courses |
| Electives-2 credits | 2 personalized |

Note- Wyoming County Schools Graduation Requirements begins on page 12.

| **Personal Finance | Beginning with the class of students entering $9^{\text {th }}$ grade in <br> the 2024-2025 school year and thereafter, each high school <br> student shall complete one credit course of study in <br> personal finance during their $11^{\text {th }}$ or $12^{\text {th }}$ grade year as a |
| :--- | :--- |
| requirement for high school graduation. This is per state code: $\S 18-2-7 c$. |  |
| Personal Finance is identified as a Social Studies graduation requirement. This goes |  |
| into effect for the graduating class of 2028 and beyond. |  |

## Adolescent Education (Grades 9-12)

Under the direction of and with assistance from school counselors, teachers, parents, and mentors, students should determine the requirements for entering technical programs, colleges, or universities they plan to attend. This information, along with high school graduation requirements, should guide students as they create their Personalized Education Plan (PEP) and schedule high school courses.

Student must make the following decisions when completing the PEP:

1. Identify career interest.
2. Choose CTE Option 1, Non-CTE Option 2.
3. Select a career cluster from the 16 clusters defined as West Virginia Career Clusters.
4. Select a concentration option aligned with chosen career cluster.
5. Identify what four courses will be taken to fulfill concentration option.
6. Identify plans for first year after high school: 4-year college, 2-year college, technical school, military, workforce, or other.
7. Identify 4 personalized credits at either CTE or 4 credits that lead to post-secondary goals.

## Non-CTE:

Grade 9
English 9
World Studies
Earth \& Space
Algebra I*
Fine Art
Foreign Language
Health
Elective

## Grade 10

English 10
U.S. History

Biology
Geometry
P.E.

Elective Elective
Elective

Grade 11
English 11
Cont. Studies
Science
Math
Elective
Elective
Elective
Elective

Grade 12
English 12
Civics
Science
Math
Elective
Elective
Elective
Elective

AP or Capstone can be completed in grade 11 or 12.
A student has the option of attending CTE as electives are available.
CTE:
Grade $9 \quad \underline{\text { Grade 10 }} \quad \underline{\text { Grade 11 }} \quad \underline{G r a d e ~ 12 ~}$

English 9
World Studies
Earth \&Space
Algebra I*
Fine Art
Health
Elective
Elective
English 10
U.S. History

Biology
Geometry
P.E.

Elective
Elective
Elective

| English 11 | CTC |
| :--- | :--- |
| Cont. Studies | CTC |
| Science | CTC |
| Math | CTC |

CTC English 12*
CTC Civics
CTC Math*
CTC Elective
*Based upon $8^{\text {th }}$ grade $i$-Ready benchmark scores, student may also have to take Algebra I Support in grade 9.
*Students enrolled in an Embedded Math/English Program at CTC may not be required to take math/ELA course their senior year, pending successful completion of CORE requirements and Math/English Classroom Instruction at CTC. Students may receive Transition Math/English for Seniors Credit upon successful completion of program. **Students not enrolled in an Embedded Math/English Program at CTC will be required to take a math course their senior year. Students that are enrolled in an embedded Math/English program will not be enrolled in Transitional Math/English at their high school. Please be advised that NCAA WILL NOT accept Transitional English, Transitional Math, Embedded English or Embedded Math as a student's fourth English or Math requirement. Consult with your school counselor.

## Transcript Analysis by CORE AREA

## Student:

$\qquad$ Student No.: $\qquad$
*A check mark indicates that the class has been completed.
*Disclaimer: This list of requirements is subject to change without notice at any given time.
*Not all classes listed under Required Classes will apply to every student. Write NA beside classes that are non-applicable.
*A student must take and pass four classes within career cluster as specified in the Program of Study in order to graduate.
*24 credits are required for graduation (effective for Class of 2022).

## Required Class:

$\qquad$ English 9 or English 9 Honors

## -

 English 10 or English 10 Honors English 11 or AP English 11English 12 or AP English 12 or Transition ELA for Seniors
$\qquad$ Algebra I
Algebra I Support
Geometry

Math $\qquad$ Electives:
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

## ___Algebra II

$\qquad$ Math or Transition Math for Seniors

Earth and Space Science $\qquad$
Biology
Science $\qquad$
Science $\qquad$
World Studies
US History
Contemporary Studies or AP Social Studies
4 Core Concentration Courses:
Civics or AP U.S. Gov \& Pol
$\square$ Personal Finance (Class of 2028 and beyond)
$\qquad$
$\qquad$
$\qquad$ Fine Art $\qquad$ Foreign Language $\qquad$ Foreign Language
$\qquad$ Health Physical Education
$\qquad$ AP or Capstone $\qquad$
$\qquad$

## Grading Scale/Quality Points

| $\frac{\text { Scale }}{}$ | Letter <br> Grade | Non-Weighted <br> Quality Points | Weighted <br> Quality Points |
| :---: | :---: | :---: | :---: |
| $90-100$ | A | 4 | 5 |
| $80-89$ | B | 3 | 4 |
| $70-79$ | C | 2 | 3 |
| $60-69$ | D | 1 | 2 |
| $0-59$ | F | 0 | 0 |

## Credits Required for Promotion

To be considered a sophomore, students must have 6 credits at the end of their 9thgrade year.

To be considered a junior, students must have 12 credits at the end of their 10th-grade year.

To be considered a senior, students must have 18 credits at the end of their 11 thgrade year.

To graduate from Wyoming County Schools, you must have earned 24 credits that fall within your major/pathway that follow in line with West Virginia State Policy 2510.

## Weighted Classes

Note: All classes on this list may not be offered every year or at either high school or Career Center.
> Advanced Placement classes
> Dual Credit classes
> Trigonometry/Pre-Calculus
> Calculus
$>$ Physics
> Chemistry II
$>$ Probability and Statistics
> Discrete Math
> Medical Terminology (WCCTC)
$>$ Body Structures and Functions (WCCTC)
$>$ Informatics (Advanced Career) (WCCTC) Courses must be taken in sequential order.
$>$ Pre-Engineering (Project Lead the Way) (WCCTC)

## Advanced Placement Classes

Note: All classes on this list may not be offered every year or at either high school every year. Students must have successfully completed an Honors Course before AP enrollment. All AP students must take the AP Exam. AP Exams will be at the expense of the WCBOE.
> AP English Language and Composition 11
$>$ AP English Literature 12
$>$ AP Calculus
> AP Biology
> AP Chemistry
> AP Environmental Science
> AP U.S. Government \& Politics
> AP Psychology
> AP US History
> AP World History
$>$ AP Music Theory
> Other AP Virtual Options provided through WV Virtual (WVDE)

## Dual Credit Classes

Dual credit course offerings vary from year to year. Also, dual credit courses may not be available. See administrator and/or counselor for current list of available dual credit course offerings. The following is a list of currently approved dual credit courses:

## College Course

$>$ English 101 (Beginning Composition)
> English 201 (Advanced Composition)
> Geography 100 (Intro Human Geography)
$>$ Math 122 (Plane Trigonometry)
> PY 201 (General Psychology)
> BSC 104 (Biological Sciences)
> BSC 105 (Human Biology)
> *Other ECA Courses as Provided by College

High School Course
English 12, $1^{\text {st }}$ Semester
English 12, $2^{\text {nd }}$ Semester
Geography
Trig/Pre-Calc
Psychology
Biology, $1^{\text {st }}$ Semester
Biology, $2^{\text {nd }}$ Semester

## E.D.G.E. Credit

Most courses at the Wyoming County Career and Technical Center are E.D.G.E. credit bearing courses.

## Early College Academy

Students who participate in the program must have a cumulative high school GPA of 3.75 or higher, no more than six (6) unexcused absences, and have no disciplinary issues (zero behavior referrals, suspensions, or expulsions). Students must be enrolled at a high school that is within the participating district. Classes are held fully online, through Zoom. Classes are Monday through Friday. Additional time is required throughout the week for students to work on coursework, tutoring, online courses, or engage with their professors to ensure success. ECA courses are structured in a way that satisfies graduation requirements for both the high school and college. Students who have completed a dual-credit course or have scored above a 3 on most AP Exams will receive credits for those courses.
**Beginning with the eligible ECA junior class (year 2027), students must have successfully completed an Honors class during Freshman/Sophomore year.

## Embedded Credit

Note: Other embedded credit courses may be added.
High School Courses Eligible for Embedded Credit:

- Advanced Mathematical Modeling
- Transition English Language Arts for Seniors
- Transition Mathematics for Seniors
- Computer Science (see Coding, App, and Game Design)


## Wyoming County Career and Technical Center Programs Eligible for Embedded Credit:

- CTE-English Language Arts Embedded Credit Opportunity

Hairstyling ( D or better in all 8 required courses)
Law and Public Safety ( $D$ or better in 1225, 1226, 1039, and 1035)
ProStart (Completer: 4 required courses)
Therapeutic Services (Completer: 4 required courses)

- CTE-Mathematics Embedded Credit Opportunity

Automotive Technology (Completer: 4 required courses)
Carpentry (Completer: 4 required courses)
Drafting (Completer: 4 required courses)
Electrical Technician (Completer: 4 required courses)
Welding (Completer: 4 required courses)

- CTE-Mathematics/Computer Science Embedded Credit Opportunity

Coding, App, and Game Design (D or better in 1431 and 1456) ** Computer Science and Mathematics Credit (Course Code 3161)

- CTE-Other Mathematics Embedded Credit

Pre-Engineering (D or better in 2461, 2463, and 2464) **Advanced Mathematical Modeling Mathematics Credit (Course Code 3025C)

## Fulfillment Courses

Fulfillment courses are not transcribed.
Wyoming County Career and Technical Center Programs Eligible for Credit Fulfillment:

- Coding, App, and Game Design- D or better in 1431 fulfills (1) Art Credit
- Drafting- D or better in 1727 fulfills (1) Art Credit
- Pre-Engineering-D or better in 2463 fulfills (1) $3^{\text {rd }}$ Science Credit
- Therapeutic Services- D or better in all 4 core classes fulfills (1) $3^{\text {rd }}$ Science Credit
- Welding- D or better in 1982 fulfills (1) Art Credit


## Virtual Courses

Virtual courses may be available if a desired course is not offered at the high school. See administrator and/or counselor for more information.

## Requirements for Graduation

## Option 1 <br> CTE

4 - English
4 - Math
3 - Science
4 - Social Studies
1 - Fine Art
1 - Health
1 - Physical Ed
4 - Core Concentration

## Option 2 <br> Non-CTE

4 - English
4 - Math
4 - Science or 3 Science and 1 Cluster Course
4 - Social Studies
1 - Fine Art
1 - Health
1 - Physical Ed
2 - World Language or 2 Cluster Courses
1 - AP/AC/Dual Credit/Weighted or Capstone

Best practices recommends 2 courses of the same world language for college bound students. Students should check with their post-secondary institution because some individual programs and out of state institutions may require two years of world language.

## English Language Arts Courses

English 9 or English 9 Honors
English 10 or English 10 Honors
English 11 (AP English Language 11 can be substituted.)
English 12 or Transition ELA for Seniors** (AP English Literature 12, Creative Writing and Reading, or Technical English Language Arts can be substituted.)

## Mathematics Courses

Grade 9 Algebra I
Algebra I Support (Placement determined by grade 8 i-Ready Benchmark.)
Grade 10 Geometry
Grade 11 Algebra II or Financial Algebra
Grade 12 Math* or Transition Math for Seniors**
*Select from following course options: AP Calculus, Algebra II, Trig/Pre-Calculus, Applied Statistics, Advanced Mathematical Modeling.
**Placement in Transition Math for Seniors determined by College and Career Readiness Benchmarks on State Summative Assessment.
Students enrolled in an Embedded Math/English Program at CTC may not be required to take math/ELA course their senior year, pending successful completion of CORE requirements. Students may receive Transition Math/English for Seniors Credit upon successful completion of program. **Students not enrolled in an Embedded Math/English Program at CTC will be required to take a math course their senior year. Please be advised that NCAA WILL NOT accept Transitional English, Transitional Math, Embedded English or Embedded Math as a student's fourth English or Math requirement. Consult with your school counselor.

## Social Studies Courses

$\begin{array}{ll}\text { Grade } 9 & \text { World Studies } \\ \text { Grade } 10 & \text { U.S. History }\end{array}$
Grade 11 Contemporary Studies or AP Social Studies
Grade 12 Civics or AP U.S. Government/Politics-US
*Personal Finance Requirement (Class of 2028 and beyond)

Electives: AP Psychology, AP U.S. Studies, AP World Studies, Contemporary Studies, Economics, Geography, Psychology, Sociology

## Science Courses

## Earth and Space Science (required freshman course)

Biology (required sophomore course)
Physical Science (recommended $3^{r d}$ science option for non-STEM college path)
Chemistry (recommended $3^{\text {rd }}$ science option for STEM college path)
Physics
Environmental Science
Forensic Science
Human Anatomy and Physiology
Additional science electives include AP and dual credit science courses.

## Career and/or Technical Path

A student on the Career and Technical Path may begin with the model presented below. Physical Science is recommended for the $11^{\text {th }}$ grade because it provides a student with a third major discipline in science on the high school level. However, the student can take any science offered in WVBOE Policy 2520.3C, an AP course, or dual credit course. Students may also take additional science courses.

Grade $9 \quad$ Earth and Space Science
Grade 10 Biology
Grade $11 \quad 3{ }^{\text {rd }}$ Science choice (Physical Science recommended)

## Non-STEM College Path

A student in this path plans to attend a college or university but does not plan to major in a STEM field. Physical Science is recommended for the $11^{\text {th }}$ grade because it provides a student with a third major discipline in science on the high school level.

Grade $9 \quad$ Earth and Space Science
Grade 10 Biology
Grade $11 \quad 3^{\text {rd }}$ Science choice (Physical Science recommended)
Grade $12 \quad 4^{\text {th }}$ Science optional

## STEM College Path

A student in this path plans to attend a college or university to pursue a career in science, technology, engineering, or mathematics. Research has provided evidence that a correlation exists between math skills and success in Chemistry and Physics. Since students have had math courses to support these challenging sciences.
Chemistry is recommended for the $11^{\text {th }}$ grade and Physics is recommended for the $12^{\text {th }}$ grade. Students are also encouraged to take AP science courses.

Grade 9 Earth and Space Science
Grade 10 Biology
Grade $11 \quad 3^{\text {rd }}$ Science choice (Chemistry recommended)
Grade $12 \quad 4^{\text {th }}$ Science choice (Physics recommended)

## Course Options/Electives

This list of course options and electives is a combination of Westside High School and Wyoming East High School offerings. Elective offerings often vary from high school to high school. Some electives are offered on alternating years based upon numerous possible conditions. Elective offerings may change due to revisions of WVBOE Policy 2510. Elective offerings put on the schedule are based upon standards and student requests. Please consult your School Counselor for a list of electives common to your high school. The courses with double asterisks (**) are weighted classes. Honors courses are not weighted.

## Career Exploration

During Career Exploration, the student will attend the Career \& Technical Center two semesters to explore and experience two programs. See Career \& Technical electives for options. Health Occupations and Cosmetology are not available during Career Exploration.

## English

AP English Language and Composition 11**
AP English Literature 12**
Creative Writing
Journalism
Journalism-Video
Speech/Oral Communications
Transition English Language (seniors only)
Yearbook I
Yearbook II

## Social Studies

AP Govt \& Politics** (seniors only)
AP Psychology**
AP US History**
AP World History**
Contemporary Studies
Economics
Geography
Intro to Majors
Psychology
Sociology

## Mathematics

AP Calculus**
Advanced Mathematical Modeling
Algebra II

## Honors Courses

Financial Algebra
Probability \& Statistics**
Trig/Pre-Calculus**

## Science

AP Biology**
AP Chemistry**
AP Environmental Science**
Chemistry
Environmental Science
Forensic Science
Human Anatomy/Physiology
Physical Science
Physics**

## Computer Science

General Computer Applications I
General Computer Applications II
Coding Discoveries

## Driver Education

## Wellness Education

Driver Education

## Fine Arts

AP Music Theory**
Art Appreciation
Art I
Art II
Art III
Art IV
Band I (Marching/Concert)
Band II (Marching/Concert)
Band III (Marching/Concert)
Band IV (Marching/Concert)
Chorus I
Chorus II
Chorus III

## $3^{\text {rd }}$ Science Credit

Chorus IV
Crafts
Dance I
Dance II
Dance III
Dance IV
Digital Imaging/Multimedia (WCCTC)
Drafting Techniques (WCCTC)
Guitar
Instrumental Ensemble
Music Appreciation
Ornamental Metalwork (WCCTC)
Piano
Theatre I
Theatre II
Theatre III
Theatre IV
Theatre/Stagecraft

Therapeutic Services
Available at WCCTC
Upon completion of the following:
3 required courses ( 0711,1715 , and any Clinical Specialty)

Placement based on College and Career Readiness indicators:
Transition ELA for Seniors
Transition Math for Seniors

Placement based on General
Summative Assessment/ i-Ready benchmark scores:

Algebra I Support

## Wyoming County Career and Technical Center Programs of Study



The following clusters include programs that are offered at the WCCTC. These clusters are chosen based on the local needs of our surrounding communities and industries. Each cluster contains a pathway description that includes the programs listed below under each.

The courses for each program listed in the left column are core concentration courses and are required for completion of the Wyoming County Schools graduation requirement. The courses listed in the right hand column are electives for that program. The applicable career cluster for each program is identified immediately below the program name. Students can also receive E.D.G.E. credit for any course taken at the CTC.

The credentials listed are not comprehensive for each program. Detailed lists for each program are available upon request at the WCCTC. The WCCTC is a school-wide Simulated Workplace.

Disclaimer: Core classes and/or electives are subject to change. Concentration courses for all clusters are not available at the CTC. AM classes are only available to $12^{\text {th }}$ grade students, and PM classes are only available to $11^{\text {th }}$ grade students. CTE Pathway requires passage of all 4 CORE classes for Graduation. Career Exploration (10 ${ }^{\text {th }}$ Grade)

Programs are available to visit for a duration of one 9 weeks. Rotation between programs occurs each 9 weeks and is handled at a WCCTC school level. All programs except Cosmetology and Health Sciences are available for rotation.

## Pathways and Number of Class Options

Listed in order as they appear on the following pages.

| Cluster Pathways | Program/Coursework Options |
| :---: | :---: |
| Architecture and Construction | 3 |
| Arts, A/V Technology, and Communication | 1 |
| Health Science | 1 |
| Hospitality and Tourism | 2 |
| Human Services | 3 |
| Information Technology (IT) | 2 |
| Law, Public Safety, Corrections, and Security | 1 |
| Manufacturing | 3 |
| Science, Technology, Engineering, and Math | 1 |
| Transportation, Distribution, and Logistics | 2 |
| Workplace Readiness (Local Curriculum) | 1 |
| Total Programs Offered at WCCTC: | $\mathbf{1 9}$ |
| Weighted Programs: | 2 |

## Cluster: Architecture and Construction

## Pathway: Construction

Employees in construction literally build our future! These are the people who build and remodel houses, apartments, industrial buildings, warehouses, office buildings, churches, schools and recreational facilities. This pathway also includes the builders of highways, streets, bridges, tunnels and airports as well as power plants, chemical plants, refineries and mills.

## Programs Listed Below:

## Carpentry- 2 Year Program

Description:
The Carpentry Program of Study focuses on careers that will build a knowledge base and technical skills in all aspects of the carpentry industry. Learners will be exposed to a broad range of construction careers and foundation knowledge including basic safety; plan reading; use of tools and equipment; basic rigging; and how to employ positive work ethics in their careers. Students will have the opportunity to earn NCCER certification for each skill set mastered. **D or Better in All 4 Core= 1 Mathematics Credit (Embedded)**

| Four Core: |  | Electives: |  |
| :--- | :--- | :--- | :--- |
| Carpentry I II | 1842 | Applications in Commercial Construction | 1820 |
| Carpentry III | 1843 | Concrete Finishing | 1821 |
| Carpentry III | 1844 | Blueprint Reading for Construction | 1822 |
| Carpentry IV | 1845 | Masonry and Plumbing | 1829 |
| Electrical Technician- 2 Year Program |  |  |  |
| Description: |  |  |  |

The Electrical Technician Program of Study focuses on careers that will build a knowledge base and technical skills in all aspects of the Electrical Trades industry. Students will have the opportunity to earn NCCER certification for each skill set mastered and be exposed to skills to develop positive work ethics.
**D or Better in All 4 Core= 1 Mathematics Credit (Embedded)

| Four Core: |  | Electives: |  |
| :--- | :--- | :--- | :--- |
| Electrical Trades I | 1756 | Blueprint Reading for Electricians | 1762 |
| Electrical Trades II | 1757 | Residential Wiring | 1769 |
| Electrical Trades III | 1758 | National Electrical Code | 1767 |
| Electrical Trades IV | 1759 | Integrated Electrical Lab | 1766 |
| Drafting/CAD- 1 Year Program |  |  |  |

Description:
This course introduces the student to the knowledge base and technical skills for advanced computer aided drafting. Areas of study include paper space/model space, layout, and add-on software. Students will demonstrate knowledge and technical expertise in the use of CAD software. Emphasis will be placed on personal and professional ethics, and students will explore a variety of career opportunities. Students will utilize problem-solving techniques and participate in laboratory activities to develop an understanding of course concepts and teachers should provide each student with real world learning opportunities and instruction related to drafting, design, and engineering occupations. Safety instruction is integrated into all activities. **D or Better in All 4 Core= 1 Mathematics Credit (Embedded)

| Four Core Only: |  |
| :--- | :--- |
| Fundamentals of Drafting | 1729 |
| Drafting Techniques | 1727 |
| Mechanical Drafting | 1725 |
| Architectural Drafting | 1721 |

## Cluster: Arts, A/V Technology, and Communication

## Pathway: Broadcasting and Journalism

Are you a good communicator? Do you love to use your artistic creativity on the job? Arts, Audio/Video Technology \& Communications is focused on careers in designing, producing, exhibiting, performing, writing, and
publishing multimedia content, such as visual and performing arts and design, journalism, and entertainment services.

Programs Listed Below:

## Multimedia Publishing- 2 Year Program

 Description:Students will learn creative and technical aspects of communications including: writing and editing for different media, page layout, digital print production, web publishing, photojournalism and advertising photography, photo editing, videography and editing, and information graphics.

| Four Core: |  | Electives: |  |
| :--- | :--- | :--- | :--- |
| Introduction to Visual Communication | 1514 | Fundamentals of Media Writing | 1518 |
| Digital Photography | 1515 | Information Graphics | 1519 |
| Videography | 1516 | Fundamentals of Computer Graphics | 1853 |
| Cross-Media Publishing | 1517 | Computer Graphics | 1854 |

## Cluster: Health Science

## Pathway: Therapeutic Services

The Therapeutic Services Pathway allows the student to explore occupations or skills primarily involved in changing the health status of the patient and other clients over time.

## Programs Listed Below:

## Certified Nursing Assistant (C N A)- Therapeutic Services- 2 Year Program

## Description:

The Therapeutic Services Program of Study allows the student to explore careers focused primarily on changing the health status of the patient over time. Health professionals in this Program of Study work directly with patients; they may provide care, treatment, counseling and health education information. **D or Better in All 4 Core= $\mathbf{1}$ English Credit (Embedded)

| Four Core: |  | Electives: |  |
| :--- | :--- | :--- | :--- |
| Foundations of Health Science | 0711 | Medical Terminology (Weighted) | 0721 |
| Advanced Principles of Health Science | 0715 | Body Structures and Functions (Weighted) | 0716 |
| Clinical Specialty I | 0789 | ECG/Phlebotomy | 0720 |
| Clinical Specialty II | 0790 | Essentials of Addiction and Prevention | 1060 |

## Cluster: Hospitality and Tourism

## Pathway: Restaurant and Food/Beverage Services

The restaurants and food and beverage services pathway includes workers who perform a variety of tasks to maintain operations and promote guest services in eating and drinking establishments. These operations may be in the business or nonprofit sectors.

## Programs Listed Below:

## Baking and Pastry- 1 Year Program

## Description:

The Baking and Pastry prepares students for various aspects of baking and pastry. Students will start with the very basics of the industry such as how ingredients work together for them to make a commercial, sellable product. Other content includes various breads, cookies, pies, cakes, tortes, plated desserts, chocolate and sugar work. This course will help prepare students for either going into a baking and pastry program at a culinary school or work in a bakery right after graduation.

Four Core Only:

| Baking and Pastry Foundations | 1980 |
| :--- | :--- |
| Baking and Pastry I | 1024 |



## Cluster: Human Services

## Pathway: Personal Care Services

The personal care services pathway includes occupations providing services related to helping people feel and look better and to making people's lives more convenient.

The Pre-Cosmetology Program of Study has three focus areas. Aesthetics focuses on knowledge, skills and methods of skin treatment and hair removal. These include electrolysis, microdermabrasion, permanent make up application, and reflexology. Nail Technology focuses on the knowledge, skills, attitudes and practices required for careers in the field of Nail Technology. Hair Stylist focuses on the knowledge, skills and principles of shampooing; cut; color; styles men and women's hair; scalp and hair issues; cut and style of wigs; and removal of unwanted hair. This Program of Study is delineated by the WV Board of Barbers and Cosmetology.

Programs Listed Below:

| Hair Styling-2 Year Program |  |  |  |
| :---: | :---: | :---: | :---: |
| ** D or better in all 8 courses=1 English Credit (Embedded) |  |  |  |
| Four Core: |  | Electives: |  |
| Barbers and Cosmetology Foundations | 1737 | Cosmetology Science I | 1738 |
| Cosmetology Professional I | 1734 | Cosmetology Science II | 1740 |
| Cosmetology Professional II | 1735 | Cosmetology Chemicals I | 1730 |
| Cosmetology Professional Advanced | 1736 | Cosmetology Chemicals II | 1750 |
| Nail Technology-1 Year Program |  |  |  |
| Four Core Only: |  |  |  |
| Barbers and Cosmetology Foundations |  |  |  |
| Nail Technology Science and Procedure |  |  |  |
| Art of Nail Technology |  |  |  |
| Nail Technology Clinical Experience |  |  |  |
| Aesthetics-1 Year Program |  |  |  |
| Four Core: |  | Fifth Core: |  |
| Barbers and Cosmetology Foundations | 1737 | General Aesthetics II | 1739 |
| General Aesthetics I | 1714 |  |  |
| Aesthetic Science I | 1731 |  |  |
| Skin Sciences | 1732 |  |  |

## Cluster: Information Technology

## Pathway: Information Support and Services

The Information Support and Services Pathway involves IT deployment, including implementing computer systems and software, providing technical assistance and managing information systems. Successful IT deployment -implementation of computer systems and software, provision of technical assistance, creation of technical documentation and management of information systems -is critical to the success of most 21st century organizations. People with expertise in Information Support and Services are in high demand for a variety of positions in organizations of all sizes and types, doing work such as integrating multiple databases at a global investment company, enabling employees to share information around the world.

## Programs Listed Below:



## Pathway: Interactive Media

Interactive Media Pathway involves careers in creating, designing and producing interactive multimedia products and services, including development of digitally-generated or computer-enhanced media used in business, training, entertainment, communications and marketing. Organizations of all types and sizes use digital media to communicate with existing and potential customers, to track transactions and to collaborate with colleagues. Web and digital communications experts can find employment opportunities in organizations of all sizes and types, doing work such as creating e-business auction Web sites.

## Coding, App, and Game Design- 1 Year Program

 Description:The Coding, App and Game Development provides knowledge and skills necessary for a career in coding, game and app design, web page publishing, computer programming, and software development industries. Students receive training in both the graphic design and technical programming elements of the industry.
**D or better in 1431 and 1456= 1 Computer Science and 1 Mathematics Credit (Embedded)

| Four Core Only: |  |
| :--- | :--- |
| Digital Imaging/ Multimedia I | 1431 |
| Digital Imaging/ Multimedia II | 1432 |
| Coding, App, and Game Design I | 1456 |
| Coding, App, and Game Design II | 1457 |

# Cluster: Law, Public Safety, Corrections, and Security 

## Pathway: Law Enforcement Services

The law enforcement services pathway includes workers who protect the lives and property of community members including controlling traffic, preventing and investigating crimes, enforcing laws and ordinances and apprehending, arresting and processing suspected criminals.

## Programs Listed Below:

| Law and Public Safety- 2 Year Program |  |  |  |  |
| :--- | :--- | :--- | :--- | :---: |
| Description: <br> The law enforcement services pathway includes workers who protect the lives and property of community <br> members including controlling traffic, preventing and investigating crimes, enforcing laws and ordinances and <br> apprehending, arresting and processing suspected criminals. <br> $* *$ <br> D or better in <br> 1225, 1226, 1039, and 1035= 1 ELA Credit (Embedded) |  |  |  |  |
| Four Core: |  | Electives: |  |  |
| Foundations of Public Safety <br> Leadership | 1225 | Seminar in Law Enforcement | 1035 |  |
| Ethical Practices in Public Safety | 1226 | Strategic Security and Protection | 1037 |  |
| Practical Applications of Public <br> Safety Leadership | 1039 | Seminar in Courts and Legal System | 1031 |  |
| Seminar in Corrections | 1034 | Forensic Science | 6044 |  |

## Cluster: Science, Technology, Engineering, and Math

## Pathway: Engineering and Technology

For a future in the Engineering and Technology pathway, students should study and apply principles from advanced mathematics, life sciences, physical science, earth and space science, and technology. In addition, future engineers and technologists should learn certain processes in mathematics, science and technology. In Grades 912 , all future engineers and technologists should study mathematics each year, learning important mathematical concepts and processes defined by the National Council of Teachers of Mathematics in Principles and Standards for School Mathematics. With such knowledge and skills, students will be able to demonstrate the following competencies: 1.) Apply mathematics, science and technology concepts to solve problems quantitatively in engineering projects involving design, development or production in various technologies; and 2.) Recognize the core concepts of technology and their relationships with engineering, science and math, and other subjects. All future engineers and technologists should learn important science concepts and processes with an understanding of physics, chemistry and biology as a minimal set. These concepts and processes are defined by the National Research Council in the National Science Education Standards and by the American Association for the Advancement of Science in Benchmarks for Science Literacy. Additionally, learners should become proficient in the areas of technology defined by the Standards for Technological Literacy.

Programs Listed Below:

## Pre-Engineering (Project Lead the Way)- 1 Year Program <br> ***This program contains 4 weighted classes*** <br> Description:

The Pre-Engineering Program of Study focuses a broad range of engineering careers and foundation knowledge including basic safety, plan reading, use of tools and equipment as well as how to employ positive work ethics in an engineering career. **DRAFTING/CAD OR B or Higher Average in Secondary Math/Science Courses. **

| Four Core Only: |  |
| :--- | :--- |
| Introduction to Engineering Design | 2461 |


| Principles of Engineering | 2463 |
| :--- | :---: |
| Computer Integrated Manufacturing | 2465 |
| Engineering Design and Development | 2464 |

## Cluster: Manufacturing

## Pathway: Manufacturing Production Process Development

Employees in Manufacturing Production Process Development are responsible for product design and design of the manufacturing process. They work with customers to ensure the manufacturing process produces a product that meets or exceeds customer expectations. They also monitor the manufacturing process and the materials used to manufacture the product.

## Programs Listed Below:

## Welding- 2 Year Program <br> Description:

The Welding Program of Study focuses on careers that will build a knowledge base and technical skills in all aspects of the Welding industry. Students will have the opportunity to earn both NCCER certification and the WV Welding Certification for each skill set mastered and be exposed to skills to develop positive work ethics.
**D or Better in All Core= 1 Mathematics Credit (Embedded)

| Four Core: |  | Electives: |  |
| :--- | :--- | :---: | :---: |
| Welding I | 1862 | Gas Metal ARC Welding | 1987 |
| Welding II | 1863 | Ornamental Metalwork | 1982 |
| Welding III | 1864 | Blueprint Reading and Metallurgy | 1983 |
| Welding IV | 1865 | Gas Tungsten ARC Welding | 1989 |

## Cluster: Transportation, Distribution, and Logistics

## Pathway: Facility and Mobile Equipment Maintenance

Careers in the Facility and Mobile Equipment Maintenance pathway include the maintenance, repair, and servicing of vehicles and transportation facilities, as well as the refueling of mobile equipment. All transportation relies on equipment which must function as designed, whenever needed. The people in this pathway keep the equipment and machinery running while looking for more efficient, safe, and cost-effective ways to do so.

## Programs Listed Below:

## Automotive Technology- 2 Year Program

Description:
The Automotive Technology Program of Study focuses on careers that will build a knowledge base and technical skills in all aspects of the automotive industry. Skill set standards for Career Preparation Skills, Safety, Leadership Development and Customer and Personal Service have been integrated throughout the Program of Study. Student skills sets will be acquired for Automotive Maintenance and Light Repair in the areas of Automotive Service Consultant, Tire Repair and Replacement, Maintenance Services, Electrical System Diagnosis and Repair, Engine and Engine Performance Diagnosis and Repair, Heating and Air Conditioning Diagnosis and Repair, Brake System Diagnosis and Repair, Suspension and Steering Diagnosis and Repair, and Driveline Diagnosis and Repair. Students will have the opportunity to acquire hours towards industry certification and be exposed to skills to develop positive work ethics. **D or Better in All 4 Core= $\mathbf{1}$ Mathematics Credit (Embedded)

| Four Core: |  | Electives: |  |
| :--- | :--- | :--- | :--- |
| Automotive Tech MLR I | 1631 | Auto Tech Assistant I | 1629 |
| Automotive Tech MLR II | 1623 | Auto Tech Assistant II | 1633 |
| Automotive Tech MLR III | 1635 | Auto Tech Assistant III | 1635 |
| Automotive Tech MLR IV | 1627 | Auto Tech Assistant IV | 1627 |
| Diesel Technology- 2 Year Program |  |  |  |

## Description:

The Diesel Equipment Technology Program of Study focuses on careers that will build a knowledge base and technical skills in all aspects of the Diesel Equipment Technology industry. Students will have the opportunity to acquire hours towards industry ASE/NATEF certification and be exposed to skills to develop positive work ethics.

| Four Core: |  | Electives: |  |
| :--- | :--- | :--- | :--- |
| Fundamentals of Diesel Equipment and <br> Technology | 1751 | Diesel Engine Tune-Up and Trouble- <br> Shooting | 1743 |
| Diesel Engine Components | 1741 | Diesel Equipment Electrical Systems | 1742 |
| Diesel Support Systems | 1747 | Diesel Preventative Maintenance | 1745 |
| Diesel Electronic Engine Controls | 1744 | Diesel Truck Chassis Concepts | 1749 |

## Embedded Credit Opportunities

## Pathway: ELA and Math

ELA and Math embedded credit opportunities are given in the below courses. Each WCCTC course curriculum standards align heavily with transitional English and Math college and career readiness standards (CCRs). Our English and Math instructors co-teach with each of our embedded credit programs to scaffold the students to mastery of CCRs'. English and Math instructors also teach content that is not directly covered in the embedded credit programs to ensure that all concepts under transitional English and Math are covered. Two additional courses contain an embedded Math credit, and each of those courses follow the same pattern of co-teaching with our program instructor and Math instructor.

Programs Listed Below:

| Transitional English- 4013 |
| :---: |
| Description: |
| Transitional English is offered as a 12 |
| th |
| grade ELA credit. Students focus on reading and writing skills on a technical level. |
| Embedded Credit Classes: |
| Hairstyling-4013 |
| Law and Public Safety-4013 |
| Prostart- 4013 |
| Therapeutic Services-4013 |

## Transitional Math- 3052

## Description:

Transitional Math is offered as a $12^{\text {th }}$ grade Math credit. Students focus on mathematics skills that are specific to the technical math skills required in their individual programs. Their individual programs have a high overlap of concepts found in the transitional Math curriculum.

Embedded Credit Classes:
Automotive Technology- 3052
Carpentry- 3052
Drafting- 3052
Electrical- 3052
Welding- 3052

| Computer Science and Mathematics- 3161 |
| :---: |
| Description: |
| (Call CTC for Description) |
| Embedded Credit Classes: |
| Coding, App, and Game Design- 3161 |

Advanced Mathematical Modeling- 3025C

## Description:

Primary focal points of Advanced Mathematical Modeling include the analysis of information using statistical methods and probability, modeling change and mathematical relationships, mathematical decision making in finance, and spatial and geometric modeling for decision-making. Students will learn to become critical consumers of the quantitative data that surround them every day, knowledgeable decision makers who use logical reasoning and mathematical thinkers who can use their quantitative skills to solve problems related to a wide range of situations. As students solve problems in various applied situations, they will develop critical skills for success in college and careers, including investigation, research, collaboration and both written and oral communication of their work.

[^0]Pre-Engineering- 3025C

## Core Concentration Options

Four concentration courses directly related to a student's chosen career cluster and post-secondary goals are a requirement for graduation. Best practices encourage students to take: an AP course, a fourth science, and two credits in one world language.

With 32 credits possible during four years of high school, a student has the possibility of completing both Core Concentration Options.

* A student preparing to be a completer at the Career Center can also prepare to attend a post-secondary institution.
* A student who is preparing to attend a post-secondary institution can attend the Career Center with the potential to become a completer.

Changing a Career Cluster is not recommended after entering grade 12.

| Core Concentration Courses |  |
| :--- | :--- |
| Option 1--CTE | Option 2-Non-CTE |
| 4 Career Center Core classes | World Language I or Cluster Course |
|  | World Language II or Cluster Course |
|  | $4^{\text {th }}$ Science class or Cluster Course |
|  | 1 AP/AC/Dual Credit/Weighted |
|  | Or Capstone |

## 4 Core Concentration Courses Option 1 <br> CTE <br> (Required for Graduation)

Career and technical concentration. Students must successfully complete four core classes. Most programs also have four required electives.

4 Core Concentration Courses Option 2<br>Non-CTE<br>(Required for Graduation)

Concentration classes:

1) 2 courses in same World Language OR 2 Cluster Courses
2) 4th science class $O R 1$ additional Cluster Course
3) AP/AC/Dual Credit/Weighted or Capstone

2 courses in same World Language recommended for college bound students.

## Advanced Placement Courses

> The AP class should be related to student's career cluster.

- An AP class are designed for rigor. Classes require self-discipline and investment of time.
> Students in grades 11 and 12 are eligible to take AP courses.
> AP course offerings vary from high school to high school and year to year.
> AP students will be required to take the AP Exam for each course enrolled.
> Wyoming County Schools will pay for AP Exams.

Courses:
AP English Language and Composition
AP English Literature and Composition
AP Calculus
AP Biology
AP Chemistry
AP Environmental Science

AP Music Theory
AP U.S. Government \& Politics
AP Psychology
AP US Studies
AP World Studies

## Capstone Courses

> A Capstone class will consist of regular course work and an additional project that must meet specific guidelines
> The purpose of the capstone assessment is to showcase mastery of skill set and knowledge from all courses in a concentration.
> Timelines and bi-weekly status reports will be provided to guide project.
> The Capstone class must be related to student's career cluster.
> A Capstone class must be recommended by a counselor and approved by the principal.
> The Capstone class cannot be a class used to fulfill one of the basic requirements for graduation.
> The Capstone can be completed in grade 11 or grade 12.
Capstone Courses:
$5^{\text {th }}$ English class
$5^{\text {th }}$ Math class
$5^{\text {th }}$ Science class
$5^{\text {th }}$ Social Studies class

CTC course
2nd Fine Arts class

## Cluster Courses

Student may select 2 courses from list below related to their career c/uster as specified on their PEP. Courses are in addition to credits used to fulfill basic requirements for graduation.

| AP/Capstone/Dual/Weighted | $2^{\text {nd }}$ Fine Art | $5^{\text {th }}$ Science |
| :--- | :--- | :--- |
| Computer course | $5^{\text {th }}$ ELA | $5^{\text {th }}$ Social Studies |
| CTE course | $5^{\text {th }}$ Math | World Language |

## Dual Credit Courses

Course offerings may vary from semester to semester and are dependent on college schedules. See a Counselor for a list of Dual Credit course options. Approved courses:

Art 112
English 101
English 201
Geography 100
BSC 105- Human Biology
MTH 122—Plane Trigonometry
PY 201—General Psychology
BSC 104- Biological Sciences
*Other ECA Courses as Provided by College

## West Virginia Career Clusters

## Agriculture, Food \& Natural Resources (AG)

The production, processing, marketing, distribution, financing, and development of agricultural commodities and resources including food, fiber, wood products, natural resources, horticulture, and other plant and animal products/resources.

Agribusiness Systems
Animal Systems
Environmental Service Systems
Food Products and Processing Systems
Natural Resource Systems
Plant Systems
Power, Structural and Technical Systems
AP, Capstone, or CTC* Course Options:
Home Economics, Math, Science, Social Studies

## Architecture and Construction (AR)

Careers in designing, planning, managing, building, and maintaining the built environment.

Design/Pre-Construction
Construction
Maintenance and Operations
AP, Capstone, or CTC* Course Options:
Carpentry*, Drafting*, Electrical Technician*, Math, Science, Social Studies

## Arts, A/V Technology \& Communications (AV)

Designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services.

Audio/Video Technology and Film
Journalism and Broadcasting
Performing Arts
Printing Technology
Telecommunications
Visual Arts

## AP, Capstone, or CTC Course Options:

English, Fine Arts, Math, Science, Social Studies, Multi-Media Publishing*

## Business Management \& Administration (BM)

Business Management and Administration careers encompass planning, organizing, directing and evaluating business functions essential to efficient and productive business operations. These career opportunities are available in every sector of the economy.

## Administrative Support

Business Finance and Accounting
Management
Human Resources Management
Operations Management
AP, Capstone, or CTC Course Options:
English, Math, Social Studies

## Education and Training (ED)

Planning, managing and providing education and training services, and related learning support services.

Administration and Administration Support
Professional Support Services
Teaching/Training
AP, Capstone, or CTC Course Options:
English, Fine Arts, Math, Science, Social Studies

## Finance (FI)

Planning, services for financial and investment planning, banking, insurance, and business financial management.

## Banking Services

Insurance
Securities and Investments
AP, Capstone, or CTC Course Options:
English, Math, Social Studies

## Government and Public Administration (GO)

Executing governmental functions to include Governance; National Security; Foreign Service; Planning; Revenue and Taxation; Regulation; and Management and Administration at the local, state, and federal levels.

## Foreign Service

Governance
National Security
Planning
Public Management and Administration
Regulation
Revenue and Taxation
AP, Capstone, or CTC Course Options:
English, Math, Science, Social Studies

## Health Science (HE)

Planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.

Biotechnology Research and Development
Diagnostic Services
Health Informatics
Support Services
Therapeutic Services
AP, Capstone, or CTC* Course Options:
Certified ECG Technician*, Certified Phlebotomy Technician*, Certified Nursing
Assistant*,
Direct Care Worker*, Math, Science, Social Studies

## Hospitality \& Tourism (HO)

Hospitality \& Tourism encompasses the management, marketing and operations of restaurants and other food services, lodging, attractions, recreation events and travel related services.

## Lodging

Recreation, Amusements and Attractions
Restaurants and Food/Beverage Services
Travel and Tourism

## AP, Capstone, or CTC* Course Options:

English, Fine Arts, Math, Pro-Start*, Social Studies, Baking \& Pastries*

## Human Services (HU)

Preparing individuals for employment in career pathways that relate to families and human needs.

Consumer Services
Counseling and Mental Health Services
Family and Community Services
Personal Care Service
AP, Capstone, or CTC Course Options:
English, Fine Arts, Math, Science, Social Studies, Cosmetology*

## Information Technology (IT)

Building linkages in IT occupations framework: for entry level, technical, and professional careers related to the design, development, support and management of hardware, software, multimedia, and systems integration services.

## Information Support and Services <br> Network Systems <br> Programming and Software Development

AP, Capstone, or CTC* Course Options:
Certified Internet Webmaster*, English, Math, Coding, App, \& Game Design*, Social Studies, Informatics*

## Law, Public Safety, Corrections \& Security (LA)

Planning, managing, and providing legal, public safety, protective services and homeland security, including professional and technical support services.

## Correction Services

Emergency and Fire Management Services
Law Enforcement Services
Legal Services
Security and Protective Services
AP, Capstone, or CTC Course Options:
English, Math, Science, Social Studies, Law \& Public Safety*

## Manufacturing (MA)

Planning, managing and performing the processing of materials into intermediate or final products and related professional and technical support activities such as production planning and control, maintenance and manufacturing/process engineering.

Health, Safety and Environmental Assurance
Logistics and Inventory Control
Maintenance, Installation and Repair
Manufacturing Production Process Development
Production
Quality Assurance
AP, Capstone, or CTC* Course Options:
Electronics Technician*, Math, Science, Social Studies, Welding*

## Marketing (MK)

Planning, managing, and performing marketing activities to reach organizational objectives.

Marketing Communications
Marketing Management
Marketing Research
Merchandising
Professional Sales
AP, Capstone, or CTC Course Options:
English, Fine Arts, Math, Social Studies

## Science, Technology, Engineering \& Mathematics (ST)

Planning, managing, and providing scientific research and professional and technical services (e.g., physical science, social science, engineering) including laboratory and testing services, and research and development services.

## Engineering and Technology

 Science and MathematicsAP, Capstone, or CTC Course Options:
English, Math, Science, Social Studies, PTLW*, Pre-Engineering*

## Transportation, Distribution \& Logistics (TR)

Planning, management, and movement of people, materials, and goods by road, pipeline, air, rail and water and related professional and technical support services such as transportation infrastructure planning and management, logistics services, mobile equipment and facility maintenance.

## Facility and Mobile Equipment Maintenance

Health, Safety, and Environmental Management
Logistics Planning and Management Services
Sales and Service
Transportation Operations
Transportation Systems/Infrastructure Planning, Management and Regulation
Warehousing and Distribution Center Operations
AP, Capstone, or CTC* Course Options:
Automotive Technology*, Diesel Equipment Technology*, Math, Science, Social Studies

Note: Visit http://careertech.k12.wv.us/ for detailed information about each of the 16 career clusters.



[^0]:    Embedded Credit Classes:

