

FUTURE**FORWARD**

at Bollman and Washington Square

Career and Technical Education 2020-2021

FutureForward unifies all of the Career and Technical Education (CTE) programming across Adams 12 Five Star Schools and gives all students a competitive advantage as they enter college, career or the military.

Students in FutureForward:

- Explore opportunities that prepare them for high-demand careers and give them an edge entering college.
- Engage in authentic, hands-on learning.
- Equip themselves with relevant, rigorous and practical skills.

LOCATIONS:

FutureForward at Bollman

9451 N. Washington St.
Thornton, CO
(720) 972-5820
bollmantech.adams12.org
Principal: Janet Renden

FutureForward at Washington Square

Opening in 2020-2021
12521 Washington St.
Thornton, CO
(720) 972-2900
Principal: Marvin Lewis

FutureForward at Bollman FutureForward at Washington Square

Adams 12 Five Star Schools offers Career and Technical Education (CTE) courses at its Bollman and Washington Square campuses to all high school students enrolled in the district. FutureForward at Bollman is located at 9451 North Washington Street and FutureForward at Washington Square is located at 12521 Washington Street. Bus transportation is provided for Horizon, Legacy, Mountain Range, Northglenn, Thornton, and Vantage Point students from their home high schools to each of these campuses. It will be necessary for students enrolled in programs at both campuses to have travel time built into their schedules to allow for transportation between schools.

CAREER AND TECHNICAL COURSE OFFERINGS BY CAREER PATHWAY

ARTS, & DESIGN	SKILLED TRADES, & TECHNICAL SCIENCES
<i>Graphic Design</i>	<i>Automotive Collision Repair and Refinishing</i>
<i>Video Production</i>	<i>Automotive Technology</i>
HEALTH SCIENCE	<i>Diesel Automotive Technology</i>
<i>Medical Sciences I</i>	<i>Principles of Construction, Mechanical, Electrical, and Plumbing</i>
<i>Advanced Medical Sciences II - CNA</i>	<i>Welding Technology</i>
CRIMINAL JUSTICE, & PUBLIC SAFETY	STEM, & INFORMATION TECHNOLOGY
<i>Crime Scene Investigation</i>	<i>Introduction to Computer Science</i>
<i>Emergency Medical Technician – EMT</i>	<i>A.P. Computer Science A</i>
<i>Firefighting</i>	<i>Cybersecurity</i>
<i>Law Enforcement</i>	<i>Computer Science Projects</i>
HUMAN SERVICES	<i>Aerospace Engineering (PLTW®)</i>
<i>Introduction to Behavioral and Mental Health Care</i>	<i>Engineering Design & Development - Capstone (PLTW®)</i>
HOSPITALITY, HUMAN SERVICES, & EDUCATION	<i>Principles of Engineering (PLTW®)</i>
<i>Baking & Pastry Applications (Offered at ESC)</i>	<i>Computer Integrated Manufacturing –CIM (PLTW®)</i>
<i>ProStart (Culinary Arts/Business) (Offered at ESC)</i>	
<i>Teacher Cadet</i>	

All Career and Technical Education courses meet the Fine/Practical Arts graduation requirement. These programs are offered to all Five Star students; however, it may be necessary for students to purchase supplies that are beyond the basic program requirements, and all programs have a course fee. Safety is a priority at both campuses and special clothing may be required for some program areas.

NOTE TO PARENTS:

- Any alcohol, drug, or other substance use violation could be grounds for denial of admission to a program or removal from a program once admitted.
- Excellent attendance is important in all FutureForward at Bollman and Washington Square programs. Five or more unexcused absences may result in a student being placed on an attendance contract. Failure to comply with an attendance contract may result in disenrollment from a program.
- Students enrolled in the Advanced Medical Sciences II programs will be required to have up-to-date immunizations, a TB vaccination, and a current physical.
- Students enrolled in the Advanced Medical Sciences II and Teacher Cadet programs must provide their own transportation to off-site locations for projects, clinical rotations, and observations, or teaching experiences.
- Transportation is not provided for some programs. Please speak with a FutureForward at Bollman or Washington Square campus staff member for more details.
- It is required that all students who register for a FutureForward at Bollman and Washington Square program attend the pre-acceptance meeting in April.
- Juniors are given priority acceptance into some programs. Sophomores and seniors will be accepted on a “space available” basis.
- College credits are available in many FutureForward at Bollman and Washington Square programs. Contact the registrar or counselor for more information.

EXCEPTION TO THE THREE (3) CORE CLASS REQUIREMENT: According to Superintendent Policy 6340 Section 1.4.2, “Exceptions to the three (3) core class (1-1/2 credits) requirement may be made for students at FutureForward at Bollman and Washington Square providing such students can demonstrate competency in the core areas, and students with special circumstances as approved by the principal or designee.”

HIRE EDUCATION (ON-THE-JOB-TRAINING):

Potential Credit Earned: .5 - 1.0 credit per year, up to 2.0 credits total toward graduation

Interested students who are enrolled in a pre-approved Career and Technical Education course (CTE) or who have completed the pre-approved CTE pathway, may choose to participate in HIRE Education (on-the-job-training).

In Hire Ed, students will have the opportunity to apply their classroom knowledge to their job. Students will work with the Hire Ed coordinator throughout the semester. **Students should not enroll in HIRE Education as a separate class on the course registration selection form. The HIRE Education Coordinator will sign students up after courses have begun each semester.**

- Students must work a minimum of 125 documented hours to earn .5 credits.
- Students may ONLY earn .5 credit per semester.
- Students must work a minimum of 250 documented hours to earn 1.0 credit for the entire school year.
- Students cannot earn more than 1.0 credit per school year and may ONLY earn a maximum of .5 credit per semester.
- Students may not be enrolled in and/or receive credit for more than one HIRE course at a time.
- Students may not count more than 2.0 HIRE Ed credits towards graduation requirements.
- HIRE Ed credit may not be included in nor does it count toward the 6.0 credit total required yearly for each student.
- Students must complete a HIRE Ed. Agreement to enroll.
- A student must pass the CTE course he/she is enrolled in in order to earn HIRE Ed. credit that semester.

SERVICE LEARNING

Service Learning Credit can be awarded to students that complete 60 hours of unpaid approved volunteer experience within a semester. Students need to submit the Student Volunteer Time Sheet and Work Ethics Evaluation Form completed by a supervisor from the approved volunteer company and/or organization. Hours will be verified before credit is awarded. Students must be enrolled and in good standing in a FutureForward at Bollman or Washington Square program the semester the Service Learning hours are completed and credit is awarded. Students may earn a maximum of .5 Service Learning Credit per semester. Students may not transcript more than 2.0 Service Learning credits total.

CAREERREADY COLORADO CERTIFICATE

Students enrolled in a FutureForward at Bollman and Washington Square program have the opportunity to train and test for the CareerReady Colorado Certificate developed by ACT Work Keys. Students who complete the training and testing at the Silver Level or higher will receive .5 elective credit. This certificate verifies workplace competencies in three areas: Reading for Information, Applied Mathematics, and Locating Information. The HIRE Education Coordinator facilitates training and testing. A test fee may apply.

ARTICULATION AGREEMENTS

Articulation Agreements have been established for most programs and continue to be maintained between FutureForward at Bollman and Washington Square, community colleges, 4-year colleges, and private post-secondary institutions. This allows students the opportunity to earn college credit(s). Please contact the registrar at 720-972-5827 or a counselor at 720-972-5834, or visit our website at bollmantech.adams12.org for more information or program specific questions about Articulation Agreements.

CONCURRENT ENROLLMENT

Concurrent Enrollment is designed to improve coordination between secondary and post-secondary institutions to create a seamless pathway for students to transition from one level to the next. A student is simultaneously enrolled in FutureForward at Bollman and Washington Square and an institute of higher level education. Not all programs will be eligible for Concurrent Enrollment for the 2020-2021 school year. Please contact the registrar at 720-972-5827 or a counselor at 720-972-5834, or visit our website at bollmantech.adams12.org for more information or program specific questions about Concurrent Enrollment.

AEROSPACE ENGINEERING – Project Lead the Way® (STEM Pathway)

11, 12

Credit: 1

Location: Bollman

Aerospace engineering explores the evolution of flight, navigation and control, flight fundamentals, aerospace materials, propulsion, space travel, and orbital mechanics. In addition, this course presents alternative applications for aerospace engineering concepts. Students analyze, design, and build aerospace systems. Topics covered in the course may include the history of flight, aerodynamics and aerodynamics testing, flight systems, astronautics, space life systems, aerospace materials, and systems engineering. Inter Planetary Probes and control are also explored.

Counseling Notes:

1. This course is rigorous in both Math and Science. Students registering for Aerospace should have successfully completed or be currently enrolled in CP Physics and Math III or have instructor approval.
2. This course is recommended for students interested in design and engineering.
3. Course fee: \$20.00.

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS ENROLLED IN THE AEROSPACE ENGINEERING PROGRAM:

Aerospace Engineer Mechanical Engineer Engineering Manager Aerospace Systems Analyst

AP COMPUTER SCIENCE A - (STEM, & Information Technology Pathway)

10, 11, 12

Credit: 1

Location: Bollman

AP Computer Science A is an introductory college-level computer science course. Students cultivate their understanding of coding through analyzing, writing, and testing code as they explore concepts like modularity, variables, and control structures. The course emphasizes object-oriented programming and design using the Java programming language.

Counseling Notes:

1. Course fee of \$94.00 for the A.P. Examination.
2. All students taking A.P. Computer Science A will be required to attempt the Advanced Placement Examination in order to receive the weighted credit for this course. A score of two or better demonstrates Math competency for new graduation guidelines for the class of 2021 and beyond.
3. There will also be a mandatory parent/student meeting in April that will cover class expectations. At that time, parent and student will sign an AP contract.
4. Prerequisite: Introduction to Computer Science, A.P. Computer Science Principles, or instructor approval.

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS ENROLLED IN A.P. COMPUTER SCIENCE:

Computer Programmer Computer Engineer Web Designer Video Game Designer

AUTOMOTIVE COLLISION REPAIR AND REFINISHING I & 2 - (Transportation, Distribution, & Logistics Pathway)

10, 11, 12

Credit: 2.0

Location: Bollman

Auto Collision Repair Technicians find their skills increasingly valued as more vehicles fill the roads and a greater number of traffic accidents damage these vehicles. As OEM vehicles continue to incorporate sophisticated new materials and increasing complex design technologies in their vehicles, the collision repair industry will face an ongoing need for repair technicians. Students in FutureForward's Auto Collision Repair program will learn to assess the damage, remove and install parts, straighten bent frames, remove dents, replace sections, and paint the car body. In addition, students learn how to estimate a repair job and obtain the entrepreneurial skills to operate their own business. Analyzing what is needed to complete the repair and taking the job to completion involves both problem-solving skills and critical thinking. Collision repair and refinishing is a challenging, lucrative, and a rewarding career, especially as vehicles become more diverse and high-tech in their construction. All students will have the opportunity to obtain an industry relevant I-CAR certification. **I-CAR**, the Inter-Industry Conference on Auto Collision Repair, plays a major role in supplying the industry with well-trained, knowledgeable and highly employable collision repair professionals.

Counseling Notes:

1. Students that complete this course may be eligible to test for **I-CAR**, the Inter-Industry Conference on Auto Collision Repair. This certification may be used to demonstrate competency for new graduation guidelines for the class of 2021 and beyond.

2. Safety glasses, shop shirt and appropriate shoes are required.
3. Must purchase your own respirator.
4. Course fee: \$40.00.

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS ENROLLED IN AUTO COLLISION REPAIR AND REFINISHING:

*Auto body Shop Owner/Manager
Repair Technician*

*Collision Estimator
Master Painter*

Automobile Customization

AUTOMOTIVE TECHNOLOGY I & 2 - (Transportation, Distribution, & Logistics Pathway)

10, 11, 12

Credit: 2

Location: Bollman



Auto Technology program is National Automotive Technical Education Foundation (NATEF) certified in all eight areas. Instructors are Master ASE Certified.

Auto Technology I program provides great opportunities for students interested in careers related to the automotive industry. Level I students will gain a thorough knowledge of engine performance, electronic diagnostics, light maintenance, brakes, tires, cooling systems, chassis, drivetrains, fuel systems, steering, suspension, and electrical systems. Students will have the opportunity to obtain student ASE certifications in the automotive field.

Counseling Notes:

1. Students that complete this course are eligible to test for Automotive Service Excellence (ASE) certification. This certification may be used to demonstrate competency for new graduation guidelines for the class of 2021 and beyond.
2. Safety glasses, shop shirt or coveralls, and appropriate shoes are required.
3. Course fee: \$40.00.
4. To be eligible for concurrent enrollment credit a student must maintain a grade of C or higher in the high school course.

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS ENROLLED IN THE AUTO TECHNOLOGY PROGRAM:

*Auto Shop Owner/Manager
Repair Service Estimator*

*Diesel Mechanic
Small Engine Repair*

Master Auto Technician

AUTOMOTIVE TECHNOLOGY 3 & 4 - (Transportation, Distribution, & Logistics Pathway)

11, 12

Credit: 2

Location: Bollman



Auto Technology program is National Automotive Technical Education Foundation (NATEF) certified in all eight areas. Instructors are Master ASE Certified. Auto Technology II students must demonstrate a strong interest in the auto technology industry. This program is designed to provide a thorough knowledge of engine performance, advance charging systems, advanced brakes, alignments, suspension, electrical system diagnostics, engine rebuilding, and emission testing. Students will have the opportunity to obtain student ASE certifications. It is expected that students will enroll in the AYES program.

Counseling Notes:

1. Students that complete this course are eligible to test for Automotive Service Excellence (ASE) certification. This certification may be used to demonstrate competency for new graduation guidelines for the class of 2021 and beyond.
2. Students must complete Auto I or have instructor recommendation to register for this course.
3. Safety glasses, shop shirt or coveralls, and appropriate shoes are required.
4. Course fee: \$40.00.
5. To be eligible for concurrent enrollment credit a student must maintain a grade of C or higher in the high school course.

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS ENROLLED IN THE AUTO TECHNOLOGY PROGRAM:

Auto Shop Owner/Manager Diesel Mechanic Master Auto Technician Dealer Service Technician
Repair Service Estimator Small Engine Repair

BAKING AND PASTRY APPLICATIONS 1 & 2 (Hospitality, and Business/Public Administration Pathways)

12

Credit: 2

Location: ESC

Baking Applications is designed to expose students to advanced techniques of baking and pastry, combining creativity with food science to produce ornate and delicious pastries and baked goods. For students who know they are pursuing a career in culinary arts, this class will enable them to dive deeper into advanced food production techniques, developing technical skills, and learning vital aspects of food service management. The second semester of the class involves an external internship where students will be introduced to the exciting challenges and experiences of working in a real food service establishments. Internships will require both classroom seminars and a minimum of 80 hours working with a local mentor or business partner. Students finish their internships by creating a culminating portfolio of their experiences and abilities.

Content covered in the program:

- Advanced Breads and Cakes
- Advanced and Classic Plated Desserts
- Functions of Ingredients in Baking
- Safety and Sanitation
- Food Artistry and Chocolate Work
- Cold Desserts
- Pies, Souffles, and Custards
- Employability Skills
- Food service Management

Counseling Notes:

1. Students must pass ProStart 1 & 2 with a minimum of a 75% each semester prior to taking the Baking Applications class.
2. Course fee \$40.00.
3. Membership fee of \$15.00 for state and national FCCLA.

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS ENROLLED IN THE BAKING APPLICATIONS PROGRAM:

Baker Line Chef Food Scientist/R&D Chef
Pastry Chef/Chef Food Artist Food/Beverage Manager



PRINCIPLES OF CONSTRUCTION, MECHANICAL, ELECTRICAL, AND PLUMBING 1 & 2
(Architecture & Construction Pathway)

10, 11, 12

Credit: 1

Location: Washington Square

Mechanical, Electrical, and Plumbing Systems prepares students for electrical, plumbing, and HVAC careers by introducing students to the physical principles of these systems and the fundamental skills needed to work with them. Upon completion of this course, proficient students will be able to follow safety procedures and use tools to perform basic operations with electrical circuits, as well as demonstrate understanding in fundamental concepts of electricity theory (i.e. Ohm's Law). Students will be able to apply proper tools and procedures to perform basic operations with plastic piping, including measuring, cutting, and joining pipe. Furthermore, students will be able to apply mathematical concepts to solve HVAC, electrical, and plumbing problems. Students will earn the PACT HBI core certificate.

Counseling notes:

1. Students that complete this course are eligible to test for OSHA 10 and HBA certification. This certification may be used to demonstrate competency for new graduation guidelines for the class of 2021 and beyond.
2. Course fee: \$20.00.
3. Additional supplies include:
 - a. Safety toed shoes/boots.
 - b. Safety glasses.
 - c. Basic hard hat for field trip and on the job exercises.

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS ENROLLED IN THE CARPENTRY PROGRAM:

Construction Management

Carpenter

Architect

Surveyor

Home Maintenance and Repair

Interior Designer

Building Inspector

Engineering

Electrician

Plumber

HVAC



ADVANCED PRINCIPLES OF CONSTRUCTION, MECHANICAL, ELECTRICAL, AND PLUMBING 3 & 4 - (Architecture & Construction Pathway)

11, 12

Credit: 2

Location: Washington Square

Throughout the course, students will interpret construction drawings to complete projects, implementing material estimating procedures and safe working practices. Standards in this course also expand on principles of the construction industry and delve deeper into business and project management strategies.

Students will continue to learn practical applications of electrical theory and techniques used by licensed electricians. Exploration of OSHA's electrical safety-related work practices, and how they are applied to the work environment. Approaches to commercial and industrial building wiring in conformance with the current National Electrical Code and local codes using electric metallic tubing and other raceways.

Students will gain advanced knowledge and skills needed to enter the industry as HVAC and refrigeration technicians or building maintenance technicians or supervisors, prepare for a postsecondary degree in a specified field of construction

or construction management, or pursue an approved apprenticeship program. Students will acquire knowledge and skills in safety, electrical theory, use of tools, codes, installation of commercial HVAC equipment, heat pumps, and troubleshooting techniques, various duct systems, and maintenance practices.

Students will gain the advanced knowledge and skills needed to enter the industry as a plumber, building maintenance technician, or supervisor or prepare for a postsecondary degree in mechanical engineering. Students will acquire knowledge and skills in plumbing codes, industry workplace basics, and employer/customer expectations, including tool and job site safety, advanced plumbing mathematics, commercial drawings, basic electricity, hanger installation, supports and structural penetrations, roof drains, fixture installation, valves and faucets, and oxy-fuel safety. Students will also learn about setup, cutting, brazing, and welding water system sizing; gas, drain, waste and vent installation and testing; and water heater installation.

Counseling notes:

1. Students that complete this course are eligible to test for OSHA 10 and HBA certification. This certification
2. may be used to demonstrate competency for new graduation guidelines for the class of 2021 and beyond.
3. Students must complete Principles of Construction, Mechanical, Electrical, and Plumbing or have instructor recommendation to register for this course
4. Course fee: \$40.00
5. Additional supplies include:
 - a. Safety toed shoes/boots.
 - b. Safety glasses.
 - c. Basic hard hat for field trip and on-the-job exercises.

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS ENROLLED IN THE ADVANCED PRINCIPLES OF CONSTRUCTION, MECHANICAL, ELECTRICAL, AND PLUMBING PROGRAM:

<i>Construction Management</i>	<i>Carpenter</i>	<i>Architect</i>	<i>Surveyor</i>
<i>Home Maintenance and Repair</i>	<i>Interior Designer</i>	<i>Building Inspector</i>	<i>Engineering</i>
<i>Electrician</i>	<i>Plumber</i>	<i>HVAC</i>	



CONSTRUCTION, MECHANICAL, ELECTRICAL, AND PLUMBING INTERNSHIP
(Architecture & Construction Pathway)

12

Credit: 2

Location: Washington Square

This course is designed to prepare students to enter the workforce through on-the-job training in the form of an apprenticeship combined with class instruction. Training in class will continue with release time for the apprenticeship as coordinated by the instructor. Students will have the opportunity to learn their skills in supervised practical experience on the job.

Counseling notes:

1. Prerequisite: Advanced Principles of Construction, Mechanical, Electrical, and Plumbing.
2. Course fee: \$40.00.

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS ENROLLED IN THE CONSTRUCTION, MECHANICAL, ELECTRICAL, AND PLUMBING INTERNSHIP PROGRAM:

<i>Construction Management</i>	<i>Carpenter</i>	<i>Architect</i>	<i>Surveyor</i>
<i>Home Maintenance and Repair</i>	<i>Interior Designer</i>	<i>Building Inspector</i>	<i>Engineering</i>
<i>Electrician</i>	<i>Plumber</i>	<i>HVAC</i>	

COMPUTER INTEGRATED MANUFACTURING - Project Lead the Way® (STEM Pathway)

(Robotics and Automation)

11, 12

Credit: 1

Location: Bollman

How are things made? What processes go into creating products? How has automation changed manufacturing? You will be presented with design problems that require the use of SolidWorks to develop solutions. Students will learn to use CNC (Computer Numeric Control) machinery to produce your design and learn to program the robot to produce your product in quantity. Utilizes project/problem base learning. Students will design, create, and program robotic devices. Four new software applications are learned in this course.

The following are expected outcomes:

- Learn how things are made.
- Program Robots & Robotic Arms
- Programmable Micro-Computers
- Solid Works Engineering Modeling Software
- Automated Machining (CNC Mill)
- Learn to speak the language of Machines

Counseling Notes:

1. This course is recommended for students interested in design and engineering
2. Students registering for CIM should have successfully completed or currently be enrolled in Contemporary Math II
3. Course fee: \$20.00

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS ENROLLED IN THE COMPUTER INTEGRATED MANUFACTURING PROGRAM:

Manufacturing

Mechanical Engineer

Industrial Engineer

Project Management

COMPUTER SCIENCE PROJECTS - (STEM, & Information Technology Pathway)

12

Credit: 1

Location: Bollman

In this one-year course students learn Agile Scrum (a framework for managing knowledge while working, with an emphasis on software development) while designing a Computer Science Project. By the end of the course students can take the Professional Scrum Master I (PSMI) Certification exam. Project areas could include: Advanced Cyber Security Skills, real world authentic problems from industry partners, or authentic problems from school district staff.

Counseling Notes:

1. Prerequisite: Cybersecurity or Instructor Approval.
2. Course fee: \$20.00.

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS ENROLLED IN COMPUTER SCIENCE PROJECTS:

Information Technology

Project Manager

Software Engineer

Video Game Designer

Cybersecurity Consultant

Computer Programmer

Web Designer

CRIME SCENE INVESTIGATION 1 & 2 - (Law, Public Safety, Corrections & Security Pathway)

10, 11, & 12

Credit: 2

1 Science - CP Anatomy and Physiology

1 Practical Arts/Elective

Location: Washington Square

Why did they do it? Students will study crime and look at the possible explanations of crime from a biological, psychological, and sociological perspective. Students will also review the consequences of crime, and investigate how the criminal justice system handles criminal and their minds. Students will also learn about physical evidence in the areas of pathology, toxicology, anthropology, firearms and tool marks, and criminalistics. The course will also cover arson homicides and what evidence to look for.

This course will also concentrate on forensics, crime scene, investigative techniques, and law enforcement. Students will also learn about documents and impressions evidence, fingerprint processing, comparisons/analysis of fingerprints, collection of trace evidence, blood spatter recognition, note taking and analysis, and shooting reconstruction. We will also explore how constitutional and procedural law assists the criminal investigation process. The course features the basic procedures in crime scene management to include photography, reports, sketches, processing evidence, and related criminal procedures. It also covers interviewing suspects, witnesses and victims.

Counseling Notes:

1. Course fee: \$40.00.

Notes: Program will work in partnership with Thornton and Westminster PD

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS ENROLLED IN CRIME SCENE INVESTIGATION:

Crime Scene Analyst

Forensic Technician

Crime Scene Investigator

Private Investigator

Evidence Technician

CYBERSECURITY - (STEM, & Computer Science Pathway)

11, 12

Credit: 1

Location: Bollman

In this one-year course students increase their cyber awareness which helps to develop a more educated cyber workforce. Students will get hands on experience securing vulnerabilities on a Windows Server, a Linux machine and a Windows machine. Students will also be exploring the following topics:

Law explores the differences between a criminal offense and a moral wrong, protection of intellectual property, the functions and uses of permanent electronic records, and the role of laws in addressing social challenges.

Politics inspects how cyberspace, and specifically social media, influences the political climate around the world as well as the ways hacking affects those same politics.

Terrorism analyzes the motivations behind, desired outcomes of, and consequences of acts of terrorism and discusses appropriate counter attacks or counter measures.

Networking and Security (NS) showcases the structure of networks as well as the vulnerabilities. The need for security is heavily emphasized through man-in-the-middle attacks, cryptography, and steganography.

Ethics examines ethical implications of extensive technology use such as conceptions of friendships, privacy, personality, and the harms inherent in new technologies.

Communities investigates the necessity of a networked society, crowdsourcing information, technology used in communication, virtual collaboration, and team dynamics.

Business demonstrates the collection, storage, usage, and protection of data; cybersecurity attacks and threats; and technology to improve information security.

Artificial Intelligence introduces a definition of "smart" technology, examines the concept of intelligence, and explores the current, and potential future, roles of AI around the globe.

Counseling Notes:

1. Prerequisite: AP Computer Science or AP Computer Science Principles.
2. Course fee: \$20.00

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS ENROLLED IN CYBER SECURITY:

*Cyber Crime Investigator Cybersecurity Consultant IT Auditor Software Development
Cybersecurity Engineer*

DIESEL AUTOMOTIVE TECHNOLOGY I & 2 - (Transportation, Distribution, & Logistics Pathway)

10, 11, 12

Credit: 2

Location: Washington Square



The Diesel Automotive Technology course is a one-year program designed to train entry level diesel mechanics. Students are trained in shop safety, preventive maintenance, braking systems, suspension systems, tires, engine theory, electrical and electronic theory, troubleshooting, hydraulic theory, design and troubleshooting, powertrain theory, performance, operation and component rebuild. All courses will follow ASE standards. Students will be working on live units with real world problems to diagnose and repair to gain the hands-on experience they need to become successful Diesel technicians. Students will have the opportunity to obtain student ASE certifications in the automotive field and complete a job shadow experience.

Counseling Notes:

1. Safety glasses, shop shirt or coveralls, and steel-toed boots are required.
2. Course fee: \$40.00.
3. To be eligible for concurrent enrollment credit a student must maintain a grade of C or higher in the high school course.

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS ENROLLED IN THE DIESEL TECHNOLOGY PROGRAM:

Auto Shop Owner/Manager Diesel Mechanic Master Auto Technician Repair Service Estimator

DIESEL AUTOMOTIVE TECHNOLOGY 3 & 4 - (Transportation, Distribution, & Logistics Pathway)

11, 12

Credit: 2

Location: Washington Square



The Diesel Automotive Technology II course is a one-year program designed to train diesel mechanics to enter the workforce at the apprentice level. Students will have the opportunity to obtain student ASE certifications and a job shadow experience. It is expected that students will enroll in the AYES program.

Students are trained in:

- Advanced Manual/Automatic Transmission
- Engine Repair and Rebuild
- Advanced Computer Diagnostic & Engine Performance – Gas and Diesel Engines
- Advanced Braking Systems
- Advanced Driveline Repair
- DOT Inspection Procedures
- HVAC
- Advanced Electrical Diagnostic & Repair
- Hydraulics
- Advanced Suspension & Repair

All courses will follow ASE standards. Students will be working on live units with real-world problems to diagnose/repair and to gain the hands-on experience they need to become successful technicians.

Counseling Notes:

1. Students must have instructor recommendation to register for this course.
2. Safety glasses, shop shirt or coveralls, and steel-toe shoes are required.
3. Course fee: \$40.00.
4. To be eligible for concurrent enrollment credit a student must maintain a grade of C or higher in the high school course.

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS ENROLLED IN THE DIESEL TECHNOLOGY PROGRAM:

Auto Shop Owner/Manager Diesel Mechanic Master Auto Technician Repair Service Estimator

EMERGENCY MEDICAL TECHNICIAN - EMT 1 & 2 - (Health Science, Criminal Justice, & Public Safety Pathway)

12

Credit: 2

1 Science-Pathophysiology

1 Fine Practical Arts/Elective

Location: Washington Square

The Medical Sciences II EMT program is designed for the mature, responsible student wishing to investigate health-related careers. Students interested in registering for this program should have a serious interest and long-term goal of employment in the medical field. A strong commitment to the program is necessary to be successful in this class. This program emphasizes character building, strength, honesty, integrity, excellence, leadership, dedication, and service. Course topics include medical terminology, pathophysiology, career exploration, safety practices, ethics, and human relations. All are delivered through classroom, laboratory, and simulated clinical situations. The Medical Sciences II EMT program will provide the foundation for professional opportunities in the medical field, e.g. nursing, athletic trainer,

physician, dental, medical records, pharmacy, and emergency medical services. Medical Sciences II EMT provides students with general workplace skills and specific health industry knowledge that can assist them in attaining employment in a variety of entry-level positions within the health care setting, or continue their education at the post-secondary level. This course is exciting, yet not for everyone. It is centered for those students who choose to excel in the field of medically assisting others in the emergency setting.

Some class instruction will include rather graphic exercises which include animal organs and their accompanying fluids.

Students are encouraged to participate in HOSA (Health Occupations Students of America), and in fundraising activities for conferences and competitions.

Prerequisites:

1. Successful completion of Medical Sciences I, CP/AP Anatomy & Physiology, or other CP or AP science courses in the 11th grade year
2. Excellent attendance
3. Teacher recommendation (Science, Math, or Medical Sciences I instructor only)

Student Requirements:

- Class uniform (Navy blue cotton slacks or EMS/tactical pants, class issued EMT shirt, black shoes or boots, and dark belt) is required in class and off-site locations
 - Students are required to complete 50 hours of service learning work in a health care or other approved setting in the community. Students should begin accruing these hours in the **SUMMER** prior to the start of school.
- Course fee: \$50.00

Students in this program will learn the following skills:

- Demonstrate an understanding of the roles and responsibilities of the EMT
- Demonstrate an understanding of the medical legal aspects
- Determine and record vital signs of a sick or injured person
- Use medical identification devices
- Conduct a primary assessment of problems that are a threat to life if not corrected immediately
- Demonstrate Healthcare Professional BLS (Basic Life Support) procedures
- Recognize and control bleeding
- Recognize and control shock
- Identify and use mechanical aids to breathing
- Provide a secondary assessment of the patient
- Identify musculoskeletal injuries and treat them accordingly and effectively
- Identify the potential for a spinal injury
- Provide emergency evacuation and transfer of a sick and/or injured patient
- Identify and care for patients who need specialized care
- Provide triage to victims of mass casualty incidents
- Recognize life-threatening situations
- Recognize entrapment situations
- Assist with emergency child birth
- Identify critical incident stressors and techniques to effectively deal with them
- Communicate patient information to appropriate authorities
- Effectively communicate, both verbally and non-verbally, with patients of all ages

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS ENROLLED IN THE MEDICAL SCIENCES II - EMT BASIC:

*EMT
Paramedic*

Firefighter

ER Physician

Psychologist

Registered Nurse

ENGINEERING DESIGN & DEVELOPMENT - Project Lead the Way® (STEM Pathway)

11, 12

Credit: 1

Location: Bollman

In this capstone course, students work in teams to design and develop an original solution to a valid open-ended technical problem by applying the engineering design process. Students perform research to choose, validate, and justify a technical problem. After carefully defining the problem, teams design, build, and test their solutions while working closely with industry professionals who provide mentoring opportunities. Finally, student teams present and defend their original solution to an outside panel.

Counseling Notes:

1. Prerequisite: Successful completion of Principles of Engineering or instructor approval
2. Course fee: \$20.00

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS ENROLLED IN ENGINEERING DESIGN AND DEVELOPMENT:

Engineering

Project Manager

Machining

Manufacturing

FIREFIGHTING 1 & 2 - (Health Science, Criminal Justice, & Public Safety Pathway)

11, 12

Credit: 2

Location: Washington Square

A firefighter is an important figure within the public health and safety industry. Firefighters combat and extinguish fires, often working in high-pressure circumstances. Students will learn hands on, practical skills in firefighter orientation, safety, fire behavior, building construction, firefighter personal protective equipment, fire streams, fire control, fire detection, alarm and suppression systems, loss control, and communications. Students will also obtain both their CPR and HAZMAT certification in the firefighting I program.

Counseling Notes:

1. Course fee: \$40.00.

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS ENROLLED IN FIREFIGHTING:

Firefighter

Paramedic

Hazmat Technician

EMT

GRAPHIC DESIGN I & 2 - (Arts, A/V Technology, & Communication Pathway)

10, 11, 12

Credit: 2

Location: Bollman



Graphic Design I students learn the fundamental elements and principles of design using the creative process through to post-production. Course work and projects are developed to give each student a well-rounded understanding and the skills needed to become a proficient designer. Projects are designed to increase student's artistic abilities, give a variety

of perspectives for visual problem solving, and expand critical and creative thinking skills. Using a variety of industry standard practices, mediums, methods, and techniques students will become competent with the graphic design process. Medium includes television, magazines, books, street signs, movies, logos/branding, packaging, communication design, typography, digital illustration, photo manipulation, page layout, mobile devices, banners, and billboards. Students will work with Macintosh computers and Adobe software.

Counseling notes:

1. Supplies required:
 - Sketch book or journal
 - 8 GB or larger flash drive
 - Portfolio
 - 3-ring binder/ and 1 ream (500 sheets) copy paper
 - Refillable or disposable artist inking pen
2. Course fee: \$40.00
3. To be eligible for concurrent enrollment credit a student must maintain a grade of C or higher in the high school course.

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS ENROLLED IN THE GRAPHIC DESIGN PROGRAM:

<i>Artist Industrial Designer</i>	<i>CD/Book Jacket Designer</i>	<i>Packaging Designer</i>	<i>Production Artist</i>
<i>Layout Artist</i>	<i>Art Director</i>	<i>Web Designer</i>	<i>Publication Design</i>
<i>Entertainment Media</i>			

GRAPHIC DESIGN 3 & 4 - (Arts, A/V Technology, & Communication Pathway)

11, 12

Credit: 2

Location: Bollman



Graphic Design II students learn advanced skills and techniques in all areas of the creative process: communication arts; production; post production; print, and web medias, development; visual problem solving; critical thinking; artistic fundamentals; team building, and "real world" employability skills. Students will further expand their knowledge of speaking a global, visual language and developing awareness of the power of symbols, meanings, images and words.

Course work and projects are developed to give each student skills sets needed to become a competent, efficient designer who uses the technology as well as the psychology and marketing aspects of industry. Projects are designed to increase student's artistic abilities, give a variety perspectives for visual problem solving, expand critical and creative thinking skills, and develop skills in working within a team in a studio setting. Graphic Design II students may also complete a job shadow or internship with professional graphic designers.

Counseling Notes:

1. Prerequisite: Successful completion of Graphic Design I and instructor recommendation are required.
2. Supplies required:
 - Sketch book or journal
 - 8 GB or larger flash drive
 - Portfolio
 - 3-ring binder/ and 1 ream (500 sheets) copy paper
 - Refillable or disposable artist inking pen

3. Course fee: \$40.00 to be eligible for concurrent enrollment credit a student must maintain a grade of C or higher in the high school course.

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS ENROLLED IN THE GRAPHIC DESIGN PROGRAM:

<i>Advertising/Marketing</i>	<i>Animator/Illustrator</i>	<i>Artist</i>
<i>CD/Book Jacket Designer</i>	<i>Packaging Designer</i>	<i>Art Director</i>

INTRODUCTION TO BEHAVIORAL AND MENTAL HEALTH CARE 1 & 2 - (Human Services Pathway)

11,12

Credit: 2

1 Social Studies

1 Practical Arts/Elective

Location: Bollman

This program is designed for students who are interested in pursuing careers in the behavioral/mental health fields. Students will:

- Explore educational and professional behavioral health career pathways
- Define common behavioral and mental health disorders and spectra
- Describe the settings used in the delivery of behavioral health care, to include staff roles
- Apply legal, professional, and ethical considerations important to the delivery of safe and effective behavioral health care
- Identify various communication techniques, including therapeutic communication and motivational interviewing, to assist in developing the skills needed to build therapeutic relationships with clients and improve patient outcomes in behavioral health settings

Students may opportunity to receive college credit for PSY101 and PTE 110

Counseling Notes:

1. Students may opportunity to receive college credit for PSY101 and PTE 110.
2. Course fee: \$40.00.

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS ENROLLED IN INTRODUCTION TO BEHAVIORAL AND MENTAL HEALTH CARE:

<i>Behavioral Health Technician</i>	<i>Social Worker</i>	<i>Psychologist</i>
<i>Psychiatric Nurse</i>	<i>Therapist</i>	<i>School Counselor</i>

INTRODUCTION TO COMPUTER SCIENCE - (STEM and Computer Science Pathway)

10, 11, 12

Credit: 1

Location: Bollman

This is a one-year introductory course to computer science. In this course students will learn the fundamentals of programming using processing, a Java-based, visually-oriented language. Students will write programs that will draw pictures, run animations, create basic algorithms, simulate basic 2D games/applications, and learn language for expressing computations-JAVA. Topics to be covered in this course include variables, conditionals, loops, arrays, and classes. Students will also learn how to use computational tools to help model and understand data.

Prerequisites: CMIC I

Counseling Notes:

- 1. This course is a recommended pre-requisite to AP Computer Science A.
- 2. Course fee: \$20.00.

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS ENROLLED IN INTRODUCTION TO COMPUTER SCIENCE:

Computer Programmer *Computer Engineer* *Web Designer* *Video Game Designer*
IT Specialist *Network Technician*

LAW ENFORCEMENT 1 & 2 - (Law, Public Safety, Corrections & Security Pathway)

11, 12

Credit: 2.0

Location: Washington Square

Do you dream of working as a police officer, investigator, prosecutor, defense attorney, or a victims advocate? Do you like helping your community be safe? A career in law enforcement can be exciting and rewarding. Students will learn about law-enforcement-related professions through practical, industry-related experiences—providing students exposure to defensive tactics, statutes, police procedures, courtroom procedures, and verbal de escalation so they can graduate with a competitive advantage in their chosen field. The curriculum will provide the most authentic, industry standard experience that is hands on. Students will review legal systems and procedures through the various elements of the criminal justice system. Covers the functional areas of administration of justice and reviews principles of federal, state, criminal and civil laws as they apply to and affect law enforcement. Techniques for standard law enforcement techniques and practices will be taught by both CTE educators and professionals in their respective fields.

Since the Law Enforcement program prepares students for positions in fields related to law enforcement and public safety, developing and maintaining professional skills is paramount and is a significant element throughout the program.

- Possible academic credit
- Partner with Westminster and Thornton PD
- CPR Certification
- CPAT Certification possible

Counseling Notes:

- 1. Course fee: \$40.00

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS ENROLLED IN LAW ENFORCEMENT:

Police Officer *Security Screener* *Records Specialist* *Detective*
Background Investigator

MEDICAL SCIENCES I & 2 (Health Science and STEM Pathways)

11, 12

Credit: 2

1 Science - CP Anatomy and Physiology

1 Practical Arts/Elective

Location: Bollman

The Medical Sciences I program is designed for students who are interested in pursuing careers in the health care field. This course is also recommended for students who plan to apply for Medical Sciences II in their senior year. The core curriculum is based on National Health Science Standards and is focused on the following:

- CP Anatomy & Physiology
- Health care career exploration
- Workplace skills, including problem-solving and teamwork
- Medical terminology
- Medical math
- Cultural diversity
- Law and Ethics in Health Care
- Students may receive training and test for certification in First Aid and CPR

Students are encouraged to participate in HOSA (Health Occupations Students of America) and may participate in fundraising activities to help pay costs for:

- HOSA Leadership Conferences
- Cadaver field trip
- First Aid and CPR certification
- Other field trips

Counseling Notes:

1. Students that complete this course are eligible to test for National Health Science Certification.
2. Course fee: \$40.00

POSSIBLE FUTURE CAREER OPPORTUNITIES FOR STUDENTS ENROLLED IN MEDICAL SCIENCES 1:

<i>Nurse</i>	<i>Athletic Trainer</i>	<i>CNA</i>	<i>EMR/EMT/Paramedic</i>
<i>Doctor</i>	<i>Dental Hygienist</i>	<i>Vet Tech</i>	<i>Massage Therapist</i>
<i>Physical Therapist</i>	<i>Dentist</i>	<i>Veterinarian</i>	<i>Psychiatrist</i>

ADVANCED MEDICAL SCIENCES - CNA 1 & 2 - Certified Nurse Aide - (Health Science and STEM Pathways)

12

Credit: 2.5

Semester 1

- .5 Science-Pathophysiology
- .5 Fine Practical Arts/Elective

Semester 2

- .5 Science-Pathophysiology
- .5 Fine Practical Arts/Elective

In addition, please select one of the following options:

- .5 Fine Practical Arts/Elective
- Or .5 Health (if Health credit is needed)
- Or .5 P.E. (if P.E. credit is needed)

(Only one ½ credit of the above non-academic courses can be applied to meet graduation requirements.)

The Medical Sciences II CNA program is designed for the mature, responsible student wishing to investigate health related careers. Students interested in registering for this program should have a serious interest and long-term goal of employment in the medical field. A strong commitment to the program is necessary to be successful in this class. This program emphasizes character building, honesty, integrity, and professionalism. The core of the curriculum is focused on the following curriculum: medical terminology, pathophysiology, medical math, career exploration, safety practices,



ethics, and human relations. All are delivered through classroom, laboratory, and clinical situations. **Students completing this course will receive their CPR/First Aid Certification. They will also be eligible for certification as nursing assistants.** Students are encouraged to participate in HOSA (Health Occupations Students of America) and may participate in fundraising activities for conferences and competitions.

IMMUNIZATIONS NEEDED:

- MMR (Measles, mumps, rubella)
- Tdap (tetanus, diphtheria, pertussis)
- Hepatitis B ((Hep B) (Can take up to six months to complete)
- Varicella (chicken pox)
- Polio
- Influenza

All immunizations must be completed by November 1st. Health care facilities will NOT accept Exempt. If you have an exemption on your immunization record you must have liters drawn and submitted to show that you are immune.

SCREENINGS:

- TB (Tuberculosis)
- Criminal Background Check – Due November 1st
Go to: www.ccs.castlebranch.com Select FutureForward at Bollman and follow prompts.
Clinical facilities require a criminal background check on each student prior to allowing them to participate in clinical experiences at their facilities. Cost is \$25.00 if under age 18 and \$30.00 if over 18.

Prerequisites:

1. Successful completion of Medical Sciences I, CP/AP Anatomy & Physiology, or other CP or AP science course in the 11th grade year
2. Excellent attendance
3. Teacher recommendation (Science, Math, or Medical Science I instructor only)

Class Format:

Semester 1:

This course is offered in a two-hour block that includes classroom work, labs, field trips, and guest speakers.

Semester 2:

This course is offered in a three-hour block to include clinical experiences working with patients in a hospital, nursing home, and/or internship site settings. **Students must provide their own transportation for the four week clinical experiences.** Students enrolled in the 6/7/8 block must provide their own transportation after 8th hour second semester.

Student Requirements:

1. Students must have 75% or higher in the course curriculum standards and teacher recommendation to continue in this class second semester
2. Business attire is required for presentations, HOSA, and off-site locations. Uniforms are required for clinicals
3. Students are required to have the following items for clinical and internship experiences:
 - a. Watch with second hand (analog)
 - b. Black scrub pants (no sweats, leggings, or jeans) and turquoise scrub top
 - c. White or black tennis shoes
 - d. White or black socks
 - e. Tattoos must not be visible during clinicals
 - f. No facial piercings and only a single post in each ear
 - g. Nails must be kept clean and short. No artificial nails.
 - h. Appropriate hair color is required during clinicals

- Students are required to complete 50 hours of service learning work in a health care or other approved setting in the community. Students should begin accruing these hours in the **SUMMER** prior to the start of school.
- Course fee: \$50.00

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS ENROLLED IN THE MEDICAL SCIENCES II-CNA:

Pharmacist Physician/Surgeon Psychologist Registered Nurse Veterinarian

PRINCIPLES OF ENGINEERING – Project Lead the Way® (STEM Pathway)

10, 11, 12

Credit: 1

Location: Bollman

This survey course exposes students to major concepts they’ll encounter in a post-secondary engineering course of study. Topics include mechanisms, hydraulics, pneumatics, computer, interfacing, robotics, computer-aided design, electronics, energy, statics, materials, and kinematics. Students develop problem-solving skills and apply their knowledge of research and design to create solutions to various challenges, document their work, and communicate solutions.

Counseling Notes:

1. Students that complete this course are eligible to test for Solidworks certification. This certification may be used to demonstrate competency for new graduation guidelines for the class of 2021 and beyond.
2. Students should have a good understanding of basic algebra
3. This course is recommended for students interested in design and engineering
4. Completion of Intro to Engineering is recommended but not required
5. Course fee: \$20.00

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS ENROLLED IN PRINCIPLES OF ENGINEERING PROGRAM:

Mechanical Engineer Electrical Engineer Structural Engineer Alternative/Renewable Energy Technician

PROSTART 1 & 2 - (Hospitality, and Business/Public Administration Pathways)

10, 11, 12

Credit: 2

Location: ESC

(Business Management/Culinary Arts/Hospitality/Lodging Related Curriculum)



Interested in a fast-paced, hands-on, and creative career? Do you have a passion for food or travel? Then ProStart may be the class for you. The ProStart program is designed to expose students to the culinary, tourism, and hospitality fields including food preparation, management, and customer service. Through the curriculum, students are able to blend food science, technical skills, and industry knowledge with each student’s creativity and passion.

ProStart is a nationally certified college-prep business management program focusing on the hospitality industry. The ProStart curriculum is built around providing students the necessary industry skills and knowledge to succeed within the hospitality and tourism industry as well as a post-secondary hospitality or culinary program.

Content covered in this program:

- Food Safety and Sanitation
- Stocks, Soups, and Sauces
- Cooking Methods and Techniques
- Food Costing and Menu Control
- Salads, Dressings, and Dips
- Breakfast Foods and Sandwiches
- Management Strategies
- Garnishing and Plating Techniques
- Kitchen Hierarchy and Brigade
- Nutrition
- Global Cuisine
- Meat, Poultry, and Seafood
- Kitchen Equipment
- Knife Skills
- Customer Service and Serving Techniques

Counseling Notes:

1. Students that complete this course are eligible to test for ProStart certification.
2. ProStart is a college-prep program designed to prepare students for college, apprenticeships and careers in the industry.
3. An interest in business management, culinary arts, a strong academic background and leadership skills are recommended.
4. Culinary Arts is a physically demanding academic subject and students should be prepared to stand for long periods of time, lift heavy objects, and clean dishes on a daily basis.
5. ProStart is a FutureForward program taught at the Educational Support Center (Admin Building) 128th & Claude Ct.
6. Required:
 - a. Class fee: \$40.00
 - b. FCCLA membership dues: \$25.00.
 - c. Personalized chef coat: \$15.00

SOME CAREER OPPORTUNITIES FOR STUDENTS ENROLLED IN THE PROSTART PROGRAM:

<i>Caterer</i>	<i>Chef/Pastry Chef</i>	<i>Hotel General Manager</i>	<i>Food Photographer</i>
<i>Event Planner</i>	<i>Restaurant Entrepreneur</i>	<i>Food/Beverage Director</i>	<i>Food Scientist/R & D Chef</i>

TEACHER CADET I A & B - (Education Pathway)

11, 12

Credit: 2

1 Fine Practical Arts/Elective

1 English

Location: Bollman

Teacher Cadet is a college prep program designed for students who have an interest in the field of education and a career objective that includes obtaining a college degree in education or a related field. College credit may be available to students successfully completing the course. The course introduces high school juniors and seniors to the teaching profession. Students will explore how people learn, how schools operate, and what it's like to be a teacher. Teacher Cadets learn through hands-on activities, guest speakers, field trips, classroom observations, research, and job shadowing. Second semester includes student teaching experience. Excellent attendance is critical for success in this course.

Classroom Learning and Field Experience:

First semester, the Cadets are in the classroom and school community learning about the teaching profession. Second semester, the Cadets participate in an extended field experience (similar to student teaching). The Cadets work in an elementary or middle-school classroom, according to their expressed interests. The field experience provides an opportunity to observe as well as step into the role of the teacher by assisting the teacher with classroom duties, working with students, and teaching lessons. Cadets develop a professional portfolio that gives them a head-start on college.

All students participate in Family, Career and Community Leaders of America (FCCLA). FCCLA is a national student organization that helps young men and women become leaders and addresses important issues of society today. Students will have the opportunity to develop leadership skills through class and community projects, participate in competitions, and attend conferences.

Counseling Notes:

1. Students must have 75% or higher and instructor recommendation to continue second semester. Attendance is an important part of the instructor recommendation.
2. Academic credit for English will be awarded upon successful completion of each semester.
3. Students will be responsible for providing their own transportation to some school visits and to the student teaching internships second semester.
4. Course fee: \$40.00.
5. Cadets will also need to purchase the official Cadet shirt - estimated \$15-\$20.
6. Membership fee of \$15.00 for state and national FCCLA.

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS ENROLLED IN THE TEACHER CADET PROGRAM:

Child Care Teacher/Director

Counselor

Elementary/Secondary Teacher

School Administrator

Social Worker/Psychologist

Special Education Teacher

Child Advocate

Speech/Language Pathologist

Private Industry Trainer

TEACHER CADET II A & B – (Education Pathway)

12

Credit: 2

1 Fine Practical Arts/Elective

1 English

Location: Bollman

Teacher Cadet II is a college prep program designed for students who have completed Teacher Cadet I and are interested in continuing to pursue the education pathway. Teacher Cadet II students learn through hands-on activities, guest speakers, field trips, classroom observations, research, and practicums in the educational setting. Students will learn about: Instructional Teamwork; Orientation to Special Education; Student Supervision; Instructional Strategies; Behavior Management; Communication; and Support for Challenging Behavior. Students may have the opportunity to obtain paraprofessional certificate through field experience hours working with a mentor teacher throughout the school year.

Counseling notes:

1. Students must have a minimum of 75% or higher in Teacher Cadet 1 A & B and instructor recommendation to register for Teacher Cadet II A & B. Attendance is an important part of the instructor recommendation.
2. Students must have a minimum of a 'C' or higher to obtain the certificate credit
3. Course fee: \$40.00
4. Membership fee of \$15.00 for state and national FCCLA

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS ENROLLED IN THE TEACHER CADET PROGRAM:

Child Care Teacher/Director *Counselor* *Elementary/Secondary Teacher*
School Administrator *Social Worker/Psychologist* *Special Education Teacher*
Child Advocate *Speech/Language Pathologist*

VIDEO PRODUCTION I & 2 - (Arts, A/V Technology, & Communication Pathway)

10, 11, 12
Credit: 2
Location: Bollman



This course is an introduction to television, video, and film production. Students are actively involved in creating dynamic video projects using a variety of industry standard software and equipment. To be successful in the course, students are challenged to participate daily in both individual and group projects while maintaining a high level of professionalism. Students learn how to create video and films, and also how to analyze and incorporate all types of techniques into a variety of projects. Students leave with an understanding of how and why media messages are constructed and for what purposes. The following are the expected outcomes:

- Key concepts, principles, and techniques of audio, video, and film production
- Use of equipment, tools, and techniques associated with video production
- Demonstrate and apply the planning process effectively
- Project implementation for television, video, and film
- Investigate career opportunities
- Cultivate necessary workplace skills

Counseling Notes:

1. Knowledge of/or successful completion of classes in Word, PowerPoint, and Excel
2. Course fee: \$40.00

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS ENROLLED IN THE VIDEO PRODUCTION PROGRAM:

Video Editor *Production Designer* *Video Director* *Television Production Manager*

VIDEO PRODUCTION 3 & 4 - (Arts, A/V Technology, & Communication Pathway)

11, 12
Credit: 2
Location: Bollman



Advanced Video provides the students with real world experience in the field. Each student will be expected to create productions with real clients and situations. This course will focus on advancing the students skills obtained in the Video Production 1 class. The experience gained in this course will match the format and experience of a college course. Advanced techniques will give the student the head start needed to be career ready and employable.

Some of the following will be expected:

- Advanced techniques in videography and cinematography
- Video editing skills will be expected to be near expert/career ready level.
- Projects assigned will be in line with industry expectations and topics
- Pursue industry internship and job opportunities
- Budget, write, produce, and edit complete projects in the commercial, film, corporate, and documentary genres

Counseling Notes:

1. Student will need the pre-requisite of Video Production I and the approval of the Video Production teacher.
2. In-depth knowledge of Adobe Premier Pro/Apple Final Cut Pro, DSLR camera functions and composition, knowledge of Microsoft Office products
3. Course Fee: \$40.00

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS ENROLLED IN THE VIDEO PRODUCTION PROGRAM:

<i>Video Editor</i>	<i>Videographer/Cinematographer/Photographer</i>	<i>Scriptwriter</i>
<i>Storyboard creator/artist</i>	<i>Video producer/director</i>	

WELDING TECHNOLOGY I & 2 - (Manufacturing Pathway)

10, 11, 12

Credit: 2

Location: Washington Square



This course will provide students with entry-level welding skills. The Welding Technology program provides training in welding safety, oxyacetylene welding and cutting, plasma arc cutting, brazing, soldering, stick welding (SMAW), and MIG welding (GMAW). Students learn to read and make weld prints and sketches. Basic fabrication skills, including the safe use of shop tools, will be learned in conjunction with class projects and personal projects.

Counseling Notes:

1. Students that complete this course are eligible to test for American Welding Society certification. This certification may be used to demonstrate competency for new graduation guidelines for the class of 2021 and beyond.
2. Course fee: \$40.00
3. Additional supplies include:
 - a. Welding helmet
 - b. Safety glasses
 - c. Welding gloves
 - d. Welding jacket
 - e. Steel-toed boots

(Specific information about supplies will be provided at the pre-acceptance meeting.)

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS ENROLLED IN THE WELDING PROGRAM:

<i>Architect</i>	<i>Auto-Body Specialist</i>	<i>Engineer</i>	<i>Iron Worker</i>
<i>Sheet-Metal Worker</i>	<i>Sculptor</i>	<i>Pipefitter</i>	<i>Machinist</i>

WELDING TECHNOLOGY 3 & 4 - (Manufacturing Pathway)

11, 12

Credit: 2

Location: Washington Square



This course is for students who have demonstrated a strong interest in pursuing a career as a welder. This class will provide students with advanced instruction in Welding Technology including welding safety, oxyacetylene welding/cutting, plasma arc cutting, carbon arc cutting, exothermic cutting, stick welding (SMAW), flux-cored arc welding (FCAW), MIG welding (GMAW), and TIG welding (GTAW). Students will acquire improved skills in print reading and other technical information. Students successfully completing Welding Technology II may acquire an entry-level Welder's Certification from the American Welding Society.

Counseling Notes:

1. Students that complete this course are eligible to test for American Welding Society certification. This certification may be used to demonstrate competency for new graduation guidelines for the class of 2021 and beyond.
2. Welding instructor recommendation is required
3. Course fee: \$40.00
4. Required safety equipment is the same as Welding Technology I

POSSIBLE CAREER OPPORTUNITIES FOR STUDENTS ENROLLED IN THE WELDING PROGRAM:

<i>Architect</i>	<i>Auto-Body Specialist</i>	<i>Engineer</i>	<i>Iron Worker</i>
<i>Sheet-Metal Worker</i>	<i>Sculptor</i>	<i>Pipefitter</i>	<i>Machinist</i>

AFROTC

9,10,11,12

Credit: 1

Location: Westminster High School

Air Force Junior ROTC is available through a cooperative agreement with Westminster Public Schools (formerly School District 50). Classes are held at Westminster High School. Students are responsible for their own transportation to and from class and there is a \$30 course fee. Interested students should contact the BOLLMAN registrar, at 720-972-5827 for more information or Lt. Col. John Durnford at 303-487-2462.

This course teaches both aerospace studies and leadership/life skills education. Air Force topics include the heritage and development of the Air Force, including its structure, operations, customs, intercommunication skills, drill, and military ceremonies and courtesies. Aerospace topics include the development, history, and impact of flight; aircraft and spacecraft; the environment in which these crafts operate; science of flight, space technology and exploration; national defense systems; and knowledge of aviation, propulsion, and navigation. Global Studies curriculum is also included once every fourth year. This course may be repeated for credit.

Transportation for ROTC is NOT provided by Adams 12.

ACADEMIC COURSE OFFERINGS

Students **must** be enrolled in a BOLLMAN career and technical program to be eligible for enrollment in BOLLMAN academic courses.

<i>English 11 – American Lit/Comp</i>

<i>English 12 – Lit/Comp</i>

(BOLLMAN English courses meet district graduation requirements.)

Please consult with your counselor to verify which courses meet the NCAA Clearinghouse requirements before making final course selections.

ENGLISH COURSES

ENGLISH 11 (American Lit/Comp)

11

Credit: 1

This course will focus on the development of literary theme and structure across the 18th, 19th, and 20th centuries in the United States in order for students to understand the thematic progression of American literature. Students will participate in a variety of inquiry-based learning activities and verbal activities as well as write narrative, comparative analysis, informative, and persuasive pieces.

Major units of study include:

- Argument and Inquiry
- Study of Satire
- Thematic Development and Authorial Choices
- Interpretation of Drama: Genre Study
- Comparative Analysis

Counseling Notes:

1. This course is available only to 11th grade students.
2. This course meets the district English graduation requirements.

ENGLISH 12 (Lit/Comp)

12

Credit: 1

Students will engage in the study of literary movements to determine how various views affect the interpretation and understanding of literature, including pieces of classical and foundational world literature. They will also understand how works of literature are influenced by the time period in which the author lived and how that influence is reflected in the work. Students will participate in independent inquiry in which they reflect upon how their choices and actions affect how they are perceived in the world as well as how they are influenced by the time in which they live.

Major units of study include:

- Self-Directed Inquiry Project (all-year)
- Introspective and unconventional Lenses
- Historical Lenses
- Critical Lenses

Counseling Notes:

1. This course is available only to 12th grade students.
2. This course meets the district English graduation requirements.

Classes will only be offered if there is sufficient enrollment.