



**AGRICULTURE** education provides opportunity for students to deepen their understanding of the ways in which agriculture affects our economy and the job market. Agriculture classes cover many different areas that everyone used in their daily lives, and provide information to be used directly after the course is completed. The cows, plows, and sows teaching is on it's way out, and the new technology and exciting new ways to perform agriculture life are in.



**AUTOMOTIVE SERVICES TECHNOLOGY** includes classroom and laboratory experiences that incorporate training in service and repair work on all types of automotive vehicles. Included in the course is training in the use of service/repair information and a variety of hand and power tools. Instruction and practice provides opportunities for students to diagnose malfunctions, disassemble units, perform parts inspections, and repair and replace parts. Course content should address NATEF/ASE standards leading to certification in one or more of the following areas: steering and suspension; brakes; engine performance; manual transmissions and differential; automatic transmissions; electrical systems; air conditioning; and, engine repair.



**BUILDING TRADES** is for students who have a sincere desire to learn about construction work and carpentry. Students will be exposed to experiences in carpentry, masonry, siding, bricklaying, electrical wiring, drywall construction, plumbing, painting, carpeting, landscaping, heating, ventilating and air conditioning. Equipment used by students is the type used in the construction industry.



**COMPUTER AIDED DRAFTING** offers students an opportunity to pursue their interests in the drafting and design industry, using a computer-aided drafted (CAD) workstation. Personal computers and expensive frame computer systems share the same industrial environment and are becoming an industry standard. Students in CAD use personal computers with AUTOCAD software. Stations are linked to inkjet plotters for larger color plots of their work. Students use the CAD workstation to apply their drafting skills and knowledge, and expand to the computer's capability to design in 3-D. Students have an opportunity to emphasize mechanical drafting for their creative projects.



**CULINARY ARTS** program is designed to prepare students to join the workforce or continue their education in the area of food service operation, preparation, and ultimately, professional chef. Targeted areas of curriculum will include nutrition, sanitation and safety, basic food preparation, baking, pastries, meat and seafood, equipment utilization and maintenance, purchasing, inventory, and management. This program is open to Juniors and Seniors who may enroll for one or both years. It is recommended that students consider this program for two years for advancement into related post-secondary and apprenticeship programs.



**EARLY EDUCATION & CAREERS** This course prepares students for employment and careers in child-related fields. It includes planning and guiding developmentally appropriate activities for young children, application of basic health and safety principles, overview of management and operation child care facilities, and employability skills. Intensive child care, preschool and kindergarten lab experiences are included.



**ELECTRONICS TECHNOLOGY** is a course that includes classroom and laboratory experiences in wiring and schematic diagrams which is used to design, install, and repair electrical/electronic equipment such as wireless communication devices, programmable controllers, consumer electronic products, amplifiers, computers, and related equipment. Course content will include basic theories of electricity, electronics, digital technology, and basic circuit analysis. Activities include experiences in: soldering; use of an oscilloscope, meters, signal generators and tracers; bread-boarding; circuit simulation software; and troubleshooting. Understanding and using the underlying scientific principles related to electricity, electronics, circuits, sine waves, and Ohm's Law are integral to this course. Students will use mathematical principles to solve electronic problems and to troubleshoot electrical circuits. Emphasis will be placed on the ability to read, comprehend, and use information found in technical manuals.



**GRAPHIC ARTS** focuses on photo-off-set printing, developing technical skills, and individual projects as well as production projects. Successful completion of Graphic Arts I and II will allow students the ability to further their knowledge in either a 2-4 year college, or it will allow the opportunity for entry-level positions into various printing careers. Graphic Arts Print Production deals mainly with scheduling, estimating, typesetting, prepress, press, and bindery equipment.



**HEALTH CAREERS** is designed for students who have a sincere interest in health occupations, which involves lectures, labs and clinical work. The clinical time may take place at a variety of locations, giving the students the opportunity for hands-on experience. Students learn the skills, attitudes, knowledge, and understanding necessary to enter the medical field, which consists of a wide range of occupations.



**IT - INFORMATION TECHNOLOGY** is a broad area divided into four different classes. Students can choose any of the four and can enroll in one as a junior and one as a senior.

**Information Support and Services** - Students in this class will gain the necessary skills to implement computer systems and deploy software solutions, provide technical assistance, and manage information systems with attention to security.

**Interactive Media** - Students here will become competent in creating, designing, and producing secure interactive media products and services for business and industry. This program of study emphasizes the development of digitally-generated or computer-enhanced products using multimedia technology.

**Network Systems** - Students in this program will acquire skills needed to plan, design, install, maintain, and manage network solutions used in business and industry.

**Programming and Software Development** - Students in this class learn to write instructions that a computer can understand. Concepts and skills are taught by creating gaming programs, standard business programming applications, and multiple interactive web pages.



**LAW ENFORCEMENT** is of special interest to student wanting a career in corrections, law enforcement, security, or programs for the prevention of crime and delinquency. It is also suitable for students who want to become lawyers. The class looks at the historical background of how laws were formed, studies the agencies involved in the criminal justice system and learns about the methods used in solving crimes such as the use of fingerprints, hair fibers, blood stains, polygraph, etc. Guest speakers, job shadowing, direct observation of court proceedings, and hands-on experience in criminal investigations provide students with real world application of the justice system.



**PRECISION MACHINE TECHNOLOGY** is a course designed for students who wish to learn about the metals machining industry. Precision Machine Technology helps students become a highly respected, precision machinist. Through classroom and hands-on experience students gain a good foundation of knowledge of the machine tool trade. Precision Machine Technology provides job entry skills which specialize in several areas of the machine and tool industry. This is a two year program so students who choose this course should plan on completing the entire program. A background in math, drafting, and metals is recommended. Advanced Precision Machine Technology is for seniors, and can be an on-the-job (OJT) experience or additional in-school training depending upon individual needs and desires.



**PROJECT LEAD THE-WAY (PLTW)** curriculum is a four-year sequence of courses. Students can take Introduction to Engineering in their 9th grade year if they have taken (or are currently enrolled in) Algebra 1. Principles of Engineering is the second course in the sequence. After that, a choice of up to six electives might be offered in either the home school or in another of the Area 18 schools. Offerings include: Digital Electronics, Computer Integrated, Manufacturing, Civil Engineering & Architecture, Engineering Design & Development, Aerospace Engineering, and Biotechnical Engineering.



**RADIO/TV** will expose the student to radio broadcasting and television production theory. Course content covers the historical components of broadcasting and the impact of the media in today's world. Students also receive training in interviewing techniques and communication skills. Strong reading and speaking skills are recommended. Other examples of course content are recording, editing, announcing, lighting, directing and camera techniques, basic commercial writing, weather broadcasting, and creating a short radio broadcast.



**WELDING & CUTTING** Upon completion of this course the students has the essential skills and knowledge to be gainfully employed in the welding field. Students laboratory experiences account for approximately 75% of the course time and center around activities involving (1) Oxy-acetylene welding, soldering, brazing, fusion welding, oxy-acetylene cutting and plasma cutting; (2) stick electrode metal arc welding; (3) M.I.G. and T.I.G. welding. The remaining 25% of the course time is spent in classroom discussions and demonstrations.

*Area 18 Career & Technical Education has a policy of providing equal opportunity. All courses are open to all students regardless of age, race, color, sex, handicapping condition, and national origin, including Limited English Proficiency*



**AREA 18:**  
**Meeting Student**  
**and Local School**  
**Corporation/Community**  
**Needs**

**For more information contact your guidance counselor or:**

**Area 18**  
**Career & Technical Education**  
**Judy Emshwiller, Director**  
**#1 Tiger Trail**  
**Bluffton, IN 46714**  
**260-824-4602**

**Visit our website at: [www.area18.org](http://www.area18.org)**

**OUR VISION: All students will be given the opportunity to reach their fullest potential. Through involvement and participation, participating school corporations will provide a positive, safe, and supportive environment for students to learn and achieve. A collaborative partnership among parents, teachers, staff, and the business community will assume responsibility for the future success of our students.**

**OUR MISSION: To provide the opportunity for all students to be successful in life.**



**Area 18**  
**Career**  
**&**  
**Technical**  
**Education**  
**Shared**  
**Programs**



*Serving Adams, Wells, Jay, and Huntington Counties which consists of Adams Central, Belmont, Bluffton-Harrison, Huntington North, Jay County, Norwell, South Adams, and Southern Wells High Schools*