



WHITewater  
CAREER CENTER

*Where opportunities flow*

# 2017-2018 Career Program Description Guide



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**WHITEWATER CAREER CENTER**  
**Career Program Description Guide**  
**2017-2018**

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## SUMMARY CHART

The following career programs are offered at Whitewater Career Center (WCC), including the DOE Course Number, DOE Title, DOE Abbreviation, and Teacher. Detailed descriptions of each career program are included in the CAREER PROGRAM DESCRIPTIONS section of this document.

WTCC Title	IN Dept of Education DOE Course #	DOE Title	DOE Abbreviation	Teacher
Automotive Collision Technology I	5514	Automotive Collision Repair I	ACR TECH I	Tim Irrgang
Automotive Collision Technology II	5544	Automotive Collision Repair II	ACR TECH II	
Automotive Technology I	5510	Automotive Services Technology I	AUTO TECH I	Brad Bever
Automotive Technology II	5546	Automotive Services Technology II	AUTO TECH II	
Construction Technology I	5580	Construction Trades I	CONST TECH I	Brad Walton
Construction Technology II	5578	Construction Trades II	CONST TRA II	
Cosmetology I	5802	Cosmetology I	CSMTLGY I	Dora Jones
Cosmetology II	5806	Cosmetology II	CSMTLGY II	
Culinary Arts I	5440	Culinary Arts & Hospitality I	CULART HOSP	Kristin Davis
Culinary Arts II	5346	Culinary Arts & Hospitality II: Culinary Arts	CUL HOSP II: CUL ARTS	
Diesel Technology I	5620	Diesel Service Technology I	DIESL TECH I	Rod Richardson
Diesel Technology II	5624	Diesel Service Technology II	DIESL TECH II	
Education Careers I	5408	Education Professions I	ED PROF I	Rachael Hartsock
Education Careers II	5404	Education Professions II	ED PROF II	
Electricity I	4830	Construction Trades: Electrical I	CONST ECT I	Scott Sargent
Electricity II	4832	Construction Trades: Electrical II	CONST ECT II	
Graphic Design I	5232	Interactive Media	INT MEDIA	Beth Shank-Fodrea
Graphic Design II	5550	Graphic Design & Layout	GRAPH DES LT	
Health Science I	5282	Health Science Education I	HLTH ED I	Jayma Bauer Lisa Harrison
Health Science II	5284	Health Science Education II: Nursing	HSE II NURS	Nancy Redd
Information Technology I	5230	Computer Tech Support	COMP TECH	Darrell Shawl
Information Technology II	5234	Networking I	NET I	
Precision Machine Technology I	5782	Precision Machining I	PCSN MACH I	Rick Bever
Precision Machine Technology II	5784	Precision Machining II	PCSN MACH II	
Welding Technology I	5776	Welding Technology I	WELD TECH I	Phil Bedel
Welding Technology II	5778	Welding Technology II	WELD TECH II	
Interdisciplinary Cooperative Education (ICE) – CHS Only	5902	Interdisciplinary Cooperative Education	ICE	Matt Davis

## GENERAL INFORMATION

### Schedule

All classes meet three (3) hours per day. Students attend either a morning or an afternoon session. The remainder of the school day is scheduled at the home school. Students enroll in career programs for the entire school year.

### Location

The WCC campus is located near Connersville High School in Connersville, IN. All career programs are held on the WCC campus. Students in several careers programs will complete work experiences during the year at other locations in the area. These sites and transportation options are coordinated by WCC staff.

### Transportation

Students (except for Connersville High School students) are expected to ride the assigned school bus to and from WCC each day. Driving without permission will result in disciplinary action. To obtain permission, students must plan ahead and obtain signatures from both the home school and WCC in advance of the driving. Students must also have permission in advance to transport other students.

### Pre-Enrollment for a First Year Program

Six local school corporations work together to offer the programs that make up WCC. Students from each high school have an equal opportunity to complete the pre-enrollment application and participate in career programs. Students obtain a pre-enrollment form from their counselor or during their visit to WCC, complete the form, and return it to their counselor. Each pre-enrollment form must be approved by the counselor. It should be understood that submitting the form is a request for consideration to participate in a career program and not a guarantee of enrollment. A student's school records will be used by career center staff to determine career program eligibility.

Students will be evaluated based on:

- Attendance
- Discipline
- Progress toward graduation
- Career aspirations

WCC may need to make selection decisions due to more students enrolling in a career program than can be accommodated. In such cases, the above criteria will be used to review each application. WCC staff will also consult with staff from the sending high schools. Students who are not enrolled may be placed on an alternate list. As spots become available, students may be enrolled from the alternate list. Students may be denied enrollment by the home high school or WCC due to poor attendance, excessive disciplinary incidents, or lack of satisfactory progress toward graduation.

### Commitment

Acceptance into a career program is a full year, two-semester commitment. Students who begin a career program are expected to successfully complete the school year.

### Dual College Credits

Most career programs offer dual college credit opportunities. WCC has dual credit agreements with Ivy Tech Community College and Vincennes University. The benefits of dual credits include:

1. Enriches the high school curriculum.
2. Introduces high school students to the rigors of college credit courses.
3. Helps students in the transition from high school to college.
4. Helps ensure the students will graduate from college on time.
5. Helps to satisfy the requirements for the Indiana Core 40 with Academic Honors and/or Technical Honors diplomas.
6. Helps parents and students assess the student's readiness for college.
7. **Significantly reduces the cost of a college education - most dual credits are offered to the student at no cost or at a significantly reduced cost.**

The number of dual credits available and the awarding institution varies by career program. Enrollment is required for all dual credits, and placement testing and/or pre-requisite courses may also be required. Placement testing is completed at WCC or at the home high schools. Test scores determine dual credit eligibility for those career programs that require placement testing. To receive dual credits, students must successfully complete the work required. Students may be dropped from dual credit eligibility due to insufficient progress in a course. Career program teachers provide guidance on dual credit procedures, and all paperwork is completed through WCC. In some cases, a fee may apply. The ability to transfer dual credits to other colleges is dependent upon the receiving institution. Visit [transferIN.net](http://transferIN.net) to learn more about transferring credits between colleges. Dual credits offered in each career program are subject to change. For the most current information available, contact WCC or visit [www.whitewatercareercenter.org](http://www.whitewatercareercenter.org).

### Industry Certification

All career programs offer opportunities for students to earn industry certification. The certification process documents skills obtained by students within a career area. The skills and certification are recognized by employers and provide students with an advantage when going on into the workforce and/or to postsecondary education. The industry certifications available vary by career program. Testing is required for all industry certifications, and students must successfully complete all requirements to receive certification. In some cases, a fee may apply. Industry certifications offered in each career program are subject to change. For the most current information available, contact WCC or visit [www.whitewatercareercenter.org](http://www.whitewatercareercenter.org).

### Academic & Technical Honors Diplomas

Students who participate in the career programs may be eligible to earn both Academic Honors Diplomas (AHD) and Technical Honors Diplomas (THD), depending on the courses they have successfully completed throughout high school and meeting all other diploma requirements.

For more information on using credits and credentials earned in career programs to meet requirements for Academic and Technical Honors Diplomas, see your guidance counselor or contact WCC.

## CAREER PROGRAM DESCRIPTIONS

### Automotive Collision Technology I

Automotive Collision Technology I students have both classroom and laboratory experiences in all phases of the body repair process. Students examine the characteristics of body metals including the installation of moldings, ornaments, and fasteners with an emphasis on sheet metal analysis and safety. Students also study measurement principles, computerized frame diagnosis, computerized color-mixing, and estimation of repair costs. Both personal and environmental safety is stressed following OSHA standards.

DOE Code: 5514

Recommended Grade Levels: 11, 12

Required Prerequisite: None

High School Credits: 6 (3 credits per semester)

Additional Information: Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

### Automotive Collision Technology II

Automotive Collision Repair Technology II introduces concepts in automotive paint technologies with an emphasis on the handling of materials and equipment. Instruction builds on concepts learned in Automotive Collision Technology I such as computerized frame diagnosis, computerized color-mixing, and computerized estimating of repair costs. Additional academic skills taught in this course include precision measurement and mathematical calibrations as well as scientific principles related to adhesive compounds, color-mixing, abrasive materials, metallurgy, and composite materials. Upon completion of this program, students are prepared for entry-level employment in the collision industry. Students may also continue their education in 2 and 4-year degree programs at the postsecondary level.

DOE Code: 5544

Recommended Grade Level: 12

Required Prerequisite: Automotive Collision Technology I

High School Credits: 6 (3 each semester)

Additional Information: Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

Industry Certification Available:

*ASE (National Institute for Automotive Service Excellence) Student Certifications*

Testing required. Qualifies for THD Certification.

*Dual credit courses are pending approval from Vincennes University. The opportunity for students to earn dual credits in 2017-2018 is expected but not guaranteed. Visit [www.whitewatercareercenter.org](http://www.whitewatercareercenter.org) for the latest information.*

## Automotive Technology I

Students in Automotive Technology I learn to maintain and repair all types of vehicles. Students learn about steering and suspension, braking systems, manual transmissions and differentials, automatic transmissions, air conditioning, and engine repair. Mathematical skills will be reinforced through precision measuring activities and cost estimation/calculation activities. Scientific principles taught and reinforced in this program include the study of viscosity, friction, thermal expansion, and compound solutions. Written and oral skills will also be emphasized to help students communicate with customers, other students, and instructors. This program is NATEF (National Automotive Technicians Education Foundation) certified.

DOE Code: 5510

Recommended Grade Levels: 11, 12

Required Prerequisite: None

High School Credits: 6 (3 each semester)

Additional Information: Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

Dual College Credits Available:

<i>AUTI 100 Basic Automotive Service</i>	<i>Ivy Tech</i>	<i>3 credits</i>
Qualifies for THD Priority Dual Credits.		
<i>AUTI 141 Engine Fundamentals &amp; Repair</i>	<i>Ivy Tech</i>	<i>3 credits</i>
Co-requisite applies. Qualifies for THD Priority Dual Credits.		

## Automotive Technology II

Automotive Services Technology II focuses on electrical systems and engine performance. Additional areas of study include manual transmissions and differentials, automatic transmissions, air conditioning, and engine repair. Mathematical skills will be reinforced through precision measuring activities and cost estimation/calculation activities. Scientific principles taught and reinforced in this course include the study of viscosity, friction, thermal expansion, and compound solutions. Written and oral skills are also emphasized to help students communicate with customers, other students, and instructors. This program is NATEF (National Automotive Technicians Education Foundation) certified. Upon completion of this program, students are prepared for entry-level employment in the automotive service industry. Students may also continue their education in 2 and 4-year degree programs at the postsecondary level.

DOE Code: 5546

Recommended Grade Level: 12

Required Prerequisite: Automotive Technology I

High School Credits: 6 (3 each semester)

Additional Information: Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

Dual College Credits Available:

<i>AUTI 111 Electrical Systems I</i>	<i>Ivy Tech</i>	<i>3 credits</i>
Pre-requisite applies. Qualifies for THD Priority Dual Credits.		
<i>AUTI 121 Brake Systems</i>	<i>Ivy Tech</i>	<i>3 credits</i>
Co-requisite applies. Qualifies for THD Priority Dual Credits.		
<i>AUTI 122 Steering and Suspension Systems</i>	<i>Ivy Tech</i>	<i>3 credits</i>
Co-requisite applies. Qualifies for THD Priority Dual Credits.		

Industry Certification Available:

*ASE (National Institute for Automotive Service Excellence) Student Certifications*  
Testing required. Qualifies for THD Certification.

## Construction Technology I

Construction Technology I focuses on classroom and lab experiences involving the formation, installation, maintenance, and repair of buildings, homes, and other structures. A history of construction, with an emphasis on future trends and career options, is also covered. This program provides instruction in reading technical drawings and transforming those drawings into physical structures. The relationship of views and details, interpretation of dimension, transposing scale, tolerance, electrical symbols, sections, materials list, architectural plans, geometric construction, three dimensional drawing techniques, and sketching are presented as well as elementary aspects of residential design and site work. Students examine the design and construction of floor and wall systems and develop layout and floor construction skills. Blueprints and other professional planning documents are also covered. Students will develop an understanding and interpretation of the Indiana Residential Code for one and two-family dwellings and safety practices including OSHA's safety & health standards for the construction industry.

DOE Code: 5580

Recommended Grade Levels: 11, 12

Required Prerequisite: None

High School Credits: 6 (3 each semester)

Additional Information: Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

Dual College Credits Available:

<i>CONT 101 Intro to Construction Technology</i> Qualifies for THD Priority Dual Credits.	<i>Ivy Tech</i>	<i>3 credits</i>
<i>CONT 102 Construction Materials</i> Qualifies for THD Priority Dual Credits.	<i>Ivy Tech</i>	<i>3 credits</i>
<i>BCOT 104 Floor &amp; Wall Layout &amp; Construction</i> Co-requisite applies. Qualifies for THD Priority Dual Credits.	<i>Ivy Tech</i>	<i>3 credits</i>

Industry Certification Available:

*OSHA 10-Hour Safety Certification*  
Testing required. Fees apply.

## Construction Technology II

Construction Technology II builds on the formation, installation, maintenance, and repair skills learned in Construction Technology I. Information on materials, occupations, and professional organizations within the industry are covered. Students will develop basic knowledge, skills, and awareness of interior trim and the installation of drywall, moldings, interior doors, cabinets, and baseboard moldings. Students will also develop exterior finishing skills. The program includes instruction on the installation of cornices, windows, doors, and various types of sidings currently used in industry. Studies will also focus on the design and construction of roof systems and the use of framing squares for traditional rafter and truss roofing. Construction Technology II students develop leadership skills and work as team leaders. Upon completion of this program, students continue their education in 2 and 4-year degree programs at the postsecondary level or enter employment in one of the many construction fields. Students also enter apprenticeship programs for specific construction trades.

DOE Code: 5578

Recommended Grade Level: 12

Required Prerequisite: Construction Technology I

QR: This program qualifies as a quantitative reasoning course.

High School Credits: 6 (3 each semester)

Additional Information: Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

Dual College Credits Available:

<i>BCOT 105 Roof Construction</i> Pre-requisite applies. Qualifies for THD Priority Dual Credits.	<i>Ivy Tech</i>	<i>3 credits</i>
<i>BCOT 113 Interior Finishes</i> Pre-requisite applies. Qualifies for THD Priority Dual Credits.	<i>Ivy Tech</i>	<i>3 credits</i>
<i>BCOT 114 Exterior Finishes</i> Pre-requisite applies. Qualifies for THD Priority Dual Credits.	<i>Ivy Tech</i>	<i>3 credits</i>

Industry Certification Available:

*HBI (Home Builders Institute) Carpentry Basic Certification*  
Testing required. Qualifies for THD Priority Dual Credits.



## Cosmetology I

Students complete 1500 hours of instruction over two school years to meet licensure requirements by the Indiana State Board of Cosmetology. Students who complete the requirements are prepared to take the state licensing examination. In order to accumulate the hours required, students must attend Cosmetology I and II and attend three-week sessions during the summer. Topics covered include roller control, quick styling, shampooing, hair coloring, permanent waving, facials, manicuring, business and personal ethics, bacteriology, and sanitation.

DOE Code: 5802

Recommended Grade Level: 11

Required Prerequisite: None

High School Credits: 6 (3 each semester)

Additional Information: Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

Dual College Credits Available:

*COSM 100 Cosmetology I*

*Vincennes 7 credits*

Testing required. Qualifies for THD Priority Dual Credits.

*COSM 150 Cosmetology II*

*Vincennes 7 credits*

Pre-requisite applies. Qualifies for THD Priority Dual Credits.

## Cosmetology II

Second-year students complete the 1500 hours of required instruction learning advanced skills in styling, hair coloring, permanent waving, facials and manicuring. Students will also study anatomy and physiology, professionalism, and salon management in relation to cosmetology. Upon completing this program and passing the State examination, students become licensed and are prepared to be employed in a salon. Students also pursue 2 and 4-year postsecondary degrees in business, fashion design, or related fields. Some students use their license to work while continuing their education.

DOE Code: 5806

Recommended Grade Level: 12

Required Prerequisite: Cosmetology I

High School Credits: 6 (3 each semester)

Additional Information: Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

Dual College Credits Available:

*COSM 200 Cosmetology III*

*Vincennes 7 credits*

Pre-requisite applies. Qualifies for THD Priority Dual Credits.

*COSM 250 Cosmetology IV*

*Vincennes 9 credits*

Pre-requisite applies. Qualifies for THD Priority Dual Credits.

Industry Certification Available:

*Indiana State Board of Cosmetology License*

Testing required. Fees apply. Qualifies for THD Certification.

## Culinary Arts I

A variety of opportunities and experiences are used to expose students to the areas of culinary arts and hospitality. Students gain experience in food safety and personal hygiene; sanitation and safety; regulations, procedures, and emergencies; food storage; basic culinary skills; culinary math; food preparation techniques; menu planning; food cost; use of tools and equipment; and serving. Students showcase their skills when preparing and serving food for events and functions throughout the school year and when operating the WCC "Class Act" restaurant. Intensive laboratory experiences with commercial applications are a required component of this program.

DOE Code: 5440

Recommended Grade Levels: 11, 12

Required Prerequisite: None

High School Credits: 6 (3 each semester)

Additional Information: Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

Industry Certification Available:

*ServSafe Food Handler Certification*

Testing required. Fees apply.

*ProStart National Certificate of Achievement Year I*

Testing required. Qualifies for THD Priority Dual Credits.

## Culinary Arts II

Culinary Arts II prepares students for occupations and higher education programs of study related to the entire spectrum of careers in the food industry, including food production and services; food science, dietetics, and nutrition; and baking and pastry arts. Topics for this advanced program include basic baking theory and skills, introduction to breads, introduction to pastry arts, nutrition, nutrition accommodations and adaptations, cost control and purchasing, and current marketing and trends. In Culinary Arts II, students are assigned more complex, independent projects and lead work teams. Students showcase their skills when preparing and serving food for events and functions throughout the school year and when operating the WCC "Class Act" restaurant. Students completing this program may continue their education in 2 and 4-year postsecondary degree programs or gain employment in a variety of food service occupations.

DOE Code: 5346

Recommended Grade Level: 12

Required Prerequisite: Culinary Arts I

High School Credits: 6 (3 each semester)

Additional Information: Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

Industry Certification Available:

*ProStart National Certificate of Achievement Year II*

Testing required. Qualifies for THD Priority Dual Credits.

*Dual credit courses are pending approval by Ivy Tech Community College. The opportunity for students to earn dual credits in 2017-2018 is expected but not guaranteed. Visit [www.whitewatercareercenter.org](http://www.whitewatercareercenter.org) for the latest information.*

## Diesel Technology I

The program is designed to provide hands-on training related to modern diesel engines in tractor trailers, electric generators, farm and construction equipment, and diesel-fueled cars and trucks. Students learn engine operating principles and theories as well as diesel-fuel systems. Topics covered include inspection, troubleshooting, overhaul, and engine replacement procedures. The typical school day is divided between classroom and laboratory experiences concerned with all phases of repair work. Instruction and practice is provided in the diagnostics and repair of engines. The use of technical manuals, hand and power tools, and testing and diagnostic equipment is also studied in the program.

DOE Code: 5620

Recommended Grade Levels: 11, 12

Required Prerequisite: None

High School Credits: 6 (3 each semester)

Additional Information: Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

## Diesel Technology II

Diesel Technology II expands on the classroom and laboratory experiences from Diesel Technology I and focuses on all phases of diagnostic techniques and repair of diesel electrical systems used to power tractor trailers, electrical generators, construction and farm machinery, and similar equipment. Utilization of analog and digital meters, wiring diagrams, and other diagnostic tools are stressed as students are introduced to automotive electrical theory, batteries, charging systems, starting systems, wiring repairs, lighting systems, and accessories. Upon completion of this program, students are prepared for entry-level employment in the diesel technology industry. Students may also continue their education in 2 and 4-year degree programs at the postsecondary level.

DOE Code: 5624

Recommended Grade Level: 12

Required Prerequisite: Diesel Technology I

High School Credits: 6 (3 each semester)

QR: This program qualifies as a quantitative reasoning course.

Additional Information: Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

Dual College Credits Available:

*DESL 130 Diesel Engine Systems*

*Vincennes 3 credits*

Co-requisite applies. Qualifies for THD Priority Dual Credits.

*DESL 130L Diesel Engine Systems Lab*

*Vincennes 3 credits*

Co-requisite applies. Qualifies for THD Priority Dual Credits.

Industry Certification Available:

*ASE (National Institute for Automotive Service Excellence) Student Certifications*

Testing required. Qualifies for THD Certification.

## Education Careers I

Education Careers I provides the foundation for employment in education and related careers and for study in higher education. The program uses an active learning approach that utilizes higher order thinking, communication, leadership, and management processes to study education and related careers. Topics include: the teaching profession, the learner and the learning process, planning instruction, the learning environment, and instructional and assessment strategies. Students will explore teaching through field experiences in local classrooms, preschools, and other education settings. Students are monitored and evaluated during their field experiences.

DOE Code: 5408

Recommended Grade Levels: 11, 12

Required Prerequisite: None

High School Credits: 6 (3 each semester)

Additional Information: Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

Industry Certification Available:

*Education Fundamentals Certification (Pre-PAC)*

Testing required. Qualifies for THD Certification.

*CPR/AED Professional Rescuer Certification*

Testing required. Fees apply.

## Education Careers II

Education Professions II prepares students for employment in education and related careers and prepares students for study in higher education. The program expands on knowledge and skills learned in Education Careers I and includes more in depth planning, writing, and implementation of developmentally appropriate lesson plans; completing classroom observations; applying INTASC standards; applying safety and ethical principles when working with children; investigating licensing requirements related to careers in education; and enhancing employability skills related to knowledge and dispositions of elementary teachers. Students complete a portfolio project to document their experiences. Students completing this program continue their education in 2 and 4-year postsecondary programs to be eligible for a teaching license or begin a career as an instructional aide in a school.

DOE Code: 5404

Recommended Grade Level: 12

Required Prerequisite: Education Careers I

High School Credits: 6 (3 each semester)

Additional Information: Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

Dual College Credits Available:

*EDUC 100 Introduction to Teaching*

*Ivy Tech 3 credits*

Testing required. Qualifies for THD Priority Dual Credits.

Industry Certification Available:

*Education Fundamentals Certification (Pre-PAC)*

Testing required. Qualifies for THD Certification.

## Electricity I

Electricity I includes classroom and laboratory experiences focused on the installation and repair of the electrical and wiring systems of physical structures. This program includes instruction on the reading of technical drawings and their application in construction processes. Topics include the relationship between views and details, interpretation of dimension, transposing scale, tolerance, electrical symbols, sections, material lists, architectural plans, room schedules, and plot plans. Mathematical principles are used to solve electrical problems, including both AC and DC circuits. Students learn about electron theory, Ohm's Law, Watt's Law, Kirchoff's Law, series circuits, series-parallel circuits, electromagnetic induction, current, voltage, resistance, power, inductance, capacitance, and transformers and apply what they have learned to projects in the classroom and in the field. Many projects are completed in teams working with Construction Technology students.

DOE Code: 4830

Recommended Grade Levels: 11, 12

Required Prerequisite: None

High School Credits: 6 (3 each semester)

Additional Information: Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

Dual College Credits Available:

*CONT 127 Electrical Basics*

*Ivy Tech 3 credits*

Qualifies for THD Priority Dual Credits.

Industry Certification Available:

*OSHA 10-Hour Safety Certification*

Testing required. Fees apply.

## Electricity II

Electricity II includes classroom and laboratory experiences in residential wiring, including electrical service, metering equipment, lighting, switches, outlets and other common components and methods of installation and maintenance of the residential wiring system in accordance with the current National Electrical Code. Additionally, students will learn methods and techniques for troubleshooting appliances, motors, motor controls, relay wiring, commercial wiring, and industrial wiring systems. Wiring methods, material selection for commercial and industrial wiring systems, mechanical installation of hardware, and electrical design and layout are also covered. Instruction in thinking critically to analyze, synthesize, and evaluate technical problems and information will also be covered as it relates to health, safety, and welfare standards and codes as dictated by local, state or federal agencies. Upon completion of this program, students continue their education in 2 and 4-year degree programs at the postsecondary level or enter employment in one of the many construction fields. Students also enter apprenticeship programs for specific construction/electrical trades.

DOE Code: 4832

Recommended Grade Level: 12

Required Prerequisite: Electricity I

High School Credits: 6 (3 each semester)

QR: This program qualifies as a quantitative reasoning course.

Additional Information: Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

Dual College Credits Available:

*BCOT 129 Residential Wiring*

*Ivy Tech 3 credits*

Pre-requisite applies. Qualifies for THD Priority Dual Credits.

Industry Certification Available:

*HBI (Home Builders Institute) Wiring Basic Certification*

Testing required. Qualifies for THD Certification.

## Graphic Design I

Graphic Design I prepares students for careers in business and industry working with interactive media products and services, which includes the entertainment industries. This course emphasizes the development of digitally generated or computer-enhanced products using multimedia technologies. Students will develop an understanding of professional business practices including the importance of ethics, communication skills, and knowledge of the “virtual workplace.” They are able to create strong page layout compositions using the foundation principles of design, color theory, and typography. Communication skills are emphasized through the study of effective methods used to design commercial products that impart information and ideas and through group critiques. Students gain experience in Creative Suite 6 industry standard software, including Adobe InDesign, Illustrator, and Photoshop. Students are expected to be comfortable working on a computer.

DOE Code: 5232

Recommended Grade Levels: 11, 12

Required Prerequisite: None

High School Credits: 6 (3 each semester)

Additional Information: Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

## Graphic Design II

Graphic Design II includes experiences that incorporate a variety of visual art techniques as they relate to the design and execution of layouts and illustrations for advertising, displays, promotional materials, and instructional manuals. Instruction also covers advertising theory and preparation of copy, lettering, posters, and artwork in addition to incorporation of photographic images. Communication skills will be emphasized through the study of effective methods used to design commercial products that impart information and ideas. Advanced instruction includes experiences in various printing processes as well as activities in designing product packaging and commercial displays or exhibits. Second-year students also work on completing their portfolios for presentation to postsecondary institutions and employers. Students go on to a 2-year or 4-year college to major in art, graphic design, or a related area or gain employment in design related fields.

DOE Code: 5550

Recommended Grade Level: 12

Required Prerequisite: Graphic Design I

High School Credits: 6 (3 each semester)

Additional Information: Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

Dual College Credits Available:

<i>DESN 120 Computer Illustration</i> Qualifies for THD Priority Dual Credits.	<i>Vincennes</i>	<i>3 credits</i>
<i>DESN 140 Computer Imaging</i> Qualifies for THD Priority Dual Credits.	<i>Vincennes</i>	<i>3 credits</i>
<i>DESN 155 Computer Page Layout</i> Qualifies for THD Priority Dual Credits.	<i>Vincennes</i>	<i>3 credits</i>

Industry Certification Available:

*Adobe Certification*

## Health Science I

Health Science I students study topics such as human anatomy and physiology, medical terminology, medical ethics, CPR, and practical skills applicable to all health-related occupations. Leadership skills developed through participation in the HOSA student organization are also included. Job shadow experiences are completed at local health care facilities throughout one semester of the program. Job seeking and job maintenance skills, personal management skills, and self analysis to aid in career selection are also included.

DOE Code: 5282

Recommended Grade Levels: 11, 12

Required Prerequisite: None

High School Credits: 6 (3 each semester)

Additional Information: Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

Dual College Credits Available:

*HLHS 100 Introduction to Health Careers* Ivy Tech 3 credits  
Qualifies for THD Priority Dual Credits.

*HLHS 101 Medical Terminology* Ivy Tech 3 credits  
Testing required. Qualifies for THD Priority Dual Credits.

Industry Certification Available:

*AHA Heartsaver & First Aid Certification*  
Testing required. Fees apply.

*AHA CPR Health Care Provider Certification*  
Testing required. Fees apply.

## Health Science II

Health Science II is an extended laboratory experience at a clinical site designed to provide students the opportunity to assume the role of nurse assisting and practice technical skills previously learned in the classroom, including information on the health care system, employment opportunities at a variety of entry levels, an overview of the health care delivery systems, health care teams, and legal and ethical considerations. It prepares students with the knowledge, skills, and attitudes essential for providing basic care in extended care facilities, hospitals, and home health agencies under the direction of licensed nurses. These skills include recording patient medical histories and symptoms, consulting other healthcare providers, operating and monitoring medical equipment, performing diagnostic tests, teaching patients and families how to manage illness or injury, and performing general health screenings. This program also provides students with the knowledge, attitudes, and skills needed to make the transition from school to work in the field of nurse assisting, including self analysis to aid in career selection, job seeking and job maintenance skills, personal management skills, and completion of the application process for admission into a postsecondary program. HOSA, the Health Science student organization, encourages development of leadership, communication, community service, and health care related skills. Students completing this program continue their education in 2 or 4-year postsecondary degree programs, obtain employment in the healthcare industry, or use the CNA license to work while continuing their education.

DOE Code: 5284

Recommended Grade Level: 12

Required Prerequisite: Health Science I

High School Credits: 6 (3 each semester)

Additional Information: Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

Dual College Credits Available:

*HLHS 111 Health and Wellness for Life* Ivy Tech 3 credits  
Testing required. Qualifies for THD Priority Dual Credits.

Industry Certification Available:

*CNA (Indiana State Certified Nursing Assistant) Certification*  
Testing required. Fees apply. Qualifies for THD Certification.

*Pharmacy Technician Certification*  
Testing required. Fees apply. Qualifies for THD Certification.

## Information Technology I

Information Technology I allows students to explore how computers work. Students learn the functionality of hardware and software components as well as suggested best practices in maintenance and safety issues. Through hands on activities and labs, students learn how to assemble and configure a computer, install operating systems and software, and troubleshoot hardware and software problems.

DOE Code: 5230

Recommended Grade Levels: 11, 12

Required Prerequisite: None

High School Credits: 6 (3 each semester)

Additional Information: Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

Dual College Credits Available:

*CMET 140 Computer Maintenance I* Vincennes 3 credits

Qualifies for THD Priority Dual Credits.

*CMET 185 Computer Maintenance II* Vincennes 3 credits

Pre-requisite applies. Qualifies for THD Priority Dual Credits.

Industry Certification Available:

*A+ Certification*

Testing required. Fees apply. Qualifies for THD Certification.

## Information Technology II

Networking Fundamentals introduces students to concepts of local and wide area networks, home networking, networking standards using the IEEE/OSI model, network protocols, transmission media, and network architecture/topologies. Security and data integrity will be introduced and emphasized throughout this program. The purpose of this program is to offer students the critical information needed to successfully move into a role as an IT professional supporting networked computers. Concepts covered will include TCP/IP client administration, planning a network topology, configuring the TCP/IP protocol, managing network clients, configuring routers and hubs, and creating wireless LANs. Upon completing the program, students continue their education at the postsecondary level in both 2 and 4-year degree programs and enter employment in computer technology and support businesses.

DOE Code: 5234

Recommended Grade Level: 12

Required Prerequisite: Information Technology I

High School Credits: 6 (3 each semester)

Additional Information: Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

Dual College Credits Available:

*INFM 109 Informatics Fundamentals* Ivy Tech 3 credits

Testing required. Qualifies for THD Priority Dual Credits.

*ITSP 135 Hardware/Software Support* Ivy Tech 4 credits

Co-requisite applies. Qualifies for THD Priority Dual Credits.

*NETI 105 Network Fundamentals* Ivy Tech 3 credits

Testing required. Qualifies for THD Priority Dual Credits.

Industry Certification Available:

*Network+ Certification*

Testing required. Fees apply. Qualifies for THD Certification.

*Microsoft Technology Associate (MTA)*

Testing required. Fees apply. Qualifies for THD Certification.



## Precision Machine Technology I

Precision Machining I is designed to provide students with a basic understanding of the precision machining processes used in industry, manufacturing, maintenance, and repair. The program provides instruction and laboratory experience in industrial safety, terminology, tools and machine tools, measurement, and layout. Students will become familiar with print reading and with the setup and operation of power saws, drill presses, lathes, milling machines, grinders. Students will also be exposed to an introduction to CNC (computer controlled) machines.

DOE Code: 5782

Recommended Grade Levels: 11, 12

Required Prerequisite: None

High School Credits: 6 (3 each semester)

QR: This program qualifies as a quantitative reasoning course.

Additional Information: Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

Dual College Credits Available:

<i>PMTD 110 Manufacturing Processes</i>	<i>Vincennes</i>	<i>2 credits</i>
Co-requisite applies. Qualifies for THD Priority Dual Credits.		
<i>PMTD 110L Manufacturing Processes Lab</i>	<i>Vincennes</i>	<i>1 credits</i>
Co-requisite applies. Qualifies for THD Priority Dual Credits.		

## Precision Machine Technology II

Precision Machine Technology II is a more in-depth study of skills learned in Precision Machine Technology I, with a stronger focus in CNC setup, programming, and operation. Projects concentrate on precision set-up and inspection work as well as machine shop calculations. Students develop skills in advanced machining and measuring parts involving tighter tolerances and more complex geometry. Students completing this program generally continue their education at the postsecondary level in 2 and 4-year degree programs or begin their careers in machining companies. Students also enter apprenticeship programs for specific machining-related trades.

DOE Code: 5784

Recommended Grade Level: 12

Required Prerequisite: Precision Machine Technology I

High School Credits: 6 (3 each semester)

QR: This program qualifies as a quantitative reasoning course.

Additional Information: Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

Dual College Credits Available:

<i>PMTD 120 General Machines</i>	<i>Vincennes</i>	<i>6 credits</i>
Pre-requisite applies. Qualifies for THD Priority Dual Credits.		
<i>MTTC 101 Introduction to Machining</i>	<i>Ivy Tech</i>	<i>3 credits</i>
Qualifies for THD Priority Dual Credits.		
<i>MTTC 102 Turning Processes I</i>	<i>Ivy Tech</i>	<i>3 credits</i>
Co-requisite applies. Qualifies for THD Priority Dual Credits.		
<i>MTTC 103 Milling Processes I</i>	<i>Ivy Tech</i>	<i>3 credits</i>
Co-requisite applies. Qualifies for THD Priority Dual Credits.		
<i>MTTC 105 Abrasive Processes I</i>	<i>Ivy Tech</i>	<i>3 credits</i>
Co-requisite applies. Qualifies for THD Priority Dual Credits.		
<i>MTTC 110 Turning and Milling Processes I</i>	<i>Ivy Tech</i>	<i>3 credits</i>
Qualifies for THD Priority Dual Credits.		

Industry Certification Available:

*NIMS (National Institute for Metalworking Skills) Certifications*  
Fees apply. Testing required. Qualifies for THD Certification.

## Welding Technology I

Welding Technology I includes classroom and laboratory experiences that develop a variety of skills in oxy-fuel cutting and shielded metal arc welding. OSHA standards and guidelines endorsed by the American Welding Society (AWS) are used to enforce safety at all times. Instructional activities emphasize properties of metals, safety issues, print reading, electrical principles, welding symbols, and mechanical drawing through projects and exercises that teach students how to weld and be prepared for college and career success.

DOE Code: 5776

Recommended Grade Levels: 11, 12

Required Prerequisite: None

High School Credits: 6 (3 each semester)

Additional Information: Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

Dual College Credits Available:

<i>INDT 114 Introduction to Welding</i>	<i>Ivy Tech</i>	<i>3 credits</i>
Qualifies for THD Priority Dual Credits.		
<i>WELD 100 Welding Processes</i>	<i>Ivy Tech</i>	<i>3 credits</i>
Qualifies for THD Priority Dual Credits.		
<i>WELD 108 Shielded Metal Arc Welding I</i>	<i>Ivy Tech</i>	<i>3 credits</i>
Co-requisite applies. Qualifies for THD Priority Dual Credits.		

## Welding Technology II

Successful students in Welding Technology II complete the AWS Sense Level 1 certification. Welding Technology II builds on the skills covered in Welding Technology I. OSHA standards and guidelines endorsed by the American Welding Society (AWS) are used to emphasize safety at all times. Instructional activities emphasize properties of metals, safety issues, print reading, electrical principles, welding symbols, and mechanical drawing through projects and exercises that teach students how to weld and be prepared for college and career success. Upon completion of this program, students enter full-time employment, enter apprenticeships, and pursue 2 and 4-year postsecondary degrees such as welding technology and welding engineering.

DOE Code: 5778

Recommended Grade Level: 12

Required Prerequisite: Welding Technology I

High School Credits: 6 (3 each semester)

Additional Information: Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

Dual College Credits Available:

<i>WELD 109 Oxy-Fuel Gas Welding &amp; Cutting</i>	<i>Ivy Tech</i>	<i>3 credits</i>
Qualifies for THD Priority Dual Credits.		
<i>WELD 207 Gas Metal Arc Welding</i>	<i>Ivy Tech</i>	<i>3 credits</i>
Pre-requisite applies. Qualifies for THD Priority Dual Credits.		

Industry Certification Available:

*AWS (American Welding Society) Sense Level 1 Certification*  
Testing required. Qualifies for THD Certification.

### ***Interdisciplinary Cooperative Education (ICE)***

Interdisciplinary Cooperative Education (ICE) spans all career and technical education program areas through an interdisciplinary approach to training for employment. Students are placed on-the-job under the direct supervision of experienced employees who serve as on-the-job trainers/supervisors in accordance with predetermined training plans and who assist in evaluating the student's job performance. Students in an ICE placement are paid in accordance with federal and state student employment and cooperative education laws. Students are supervised by the ICE instructor. A standards-based training plan is developed by the student, instructor, and workplace trainer/supervisor to guide the student's experiences and assist in evaluating achievement and performance. The student will meet in class one day per week (3 hours). The work experience is 15 or more hours per week. Work experiences take place during school time as well as after school hours. Students completing this program may remain at the businesses where they have gained work experience through the program, move on to other employment, and/or continue their education at the postsecondary level in 2 or 4-year degree programs.

DOE Code: 5902 (*CHS only*)

Recommended Grade Level: 12

Required Prerequisite: None

High School Credits: 6 (3 each semester)

Additional Information: Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

## ADDITIONAL EXPERIENCES

### Work Based Learning

Work Based Learning allows students in the second year of their career program to gain work experience related to their career interests. Participation in Work Based Learning builds students' skill and knowledge in their chosen career path and may lead to full-time employment. To participate, students must be excellent performers in their career program and be responsible to manage their time. Students are paid for the work they perform and are supervised by both the Work Based Learning instructor and the career program instructor. A standards-based training plan is developed by the student, instructors, and workplace mentor to guide the student's work based learning experiences and assist in evaluating achievement and performance. The student will meet in class one day per week (3 hours) split between the Work Based Learning instructor and the career program instructor. The work experience is 15 or more hours per week. Work experiences take place during school time as well as after school hours. Students completing this program may remain at the businesses where they have gained work experience through the program, move on to other employment, and/or continue their education at the postsecondary level in 2 or 4-year degree programs.

DOE Code: Students remain in the applicable career program code (not a separate code)

Eligible Grade Level: 12

Required Prerequisite: Excellent performance in a career program

High School Credits: 6 (3 each semester)

Additional Information: Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas