



Columbia City High School

PROGRAM GUIDE

Columbia City High School
1600 S State Road 9
Columbia City, IN 46725
Phone: 260.244.6136
website: www.wccsonline.com
Twitter: @WccsWorks



Director's Message

Columbia City High School has a long history of strong work-based learning programs. As our economy and world change rapidly, we must ensure our students are prepared to compete at the local, state, national and international levels.

Our community partnerships have grown and support is evident through our Agribusiness, EMT, Fire & Rescue, and Health Sciences (CNA) programs. These programs are taught by industry professionals in our community.

All students benefit from CTE programs, no matter the post-secondary plans.

Opportunities provided by CTE courses and programs ensure our students are prepared to work with the tools necessary for success.

I believe in the benefits of career and technical education. If you are interested in learning more about our programs, please contact me at 260.244.2646 or reiffjl@wccsonline.com. We can discuss how CTE programs may benefit you.

Respectfully,

Jennifer Reiff

Director of Innovation (CTE) & Technology

CTE works

for students

CCHS offers courses in multiple career and technical education (CTE) pathways. No matter what a student is interested in - and whether they are considering continuing their education at a post-secondary institution or entering the workforce after high school - there is a Pathway for every student. CTE courses deliver real world skills, a real high school experience with more value, and real options for college and rewarding careers. Students can also save thousands on college tuition through dual credit courses, allowing them to jump ahead in their post-secondary education. Dual credits from Ivy Tech Community College are offered at no cost to students

for our communities

Our local economy is only as strong as the communities in which we live and work, so an investment in career and technical education is an investment in our future economy. Career and technical education offers a clear solution to a major challenge facing our economy: the shortage of skilled workers. Imagine if our local businesses could fill all empty positions and increase their productivity. In the long run, the creation of a skilled workforce can contribute to economic development that benefits everyone in the area of reducing unemployment, increasing consumer spending and attracting new businesses to the area.

for businesses

Classroom instruction is important, but it only provides part of the knowledge and skills necessary for students to be successful in their future. CCHS is proud to work with more than 100 local businesses that offer work-based learning opportunities for our students. Work-based learning helps employers develop a more robust talent pipeline, access a diverse and innovate workforce, and get branding opportunities, increased name recognition and positive press.

For High School Graduation.

See your school counselor for Graduation Pathways requirements.

TABLE OF CONTENTS

Welcome Letter/CTE Works.....	Page 2
Advanced Manufacturing.....	Page 4
Automation & Robotics.....	Page 5
Welding.....	Page 5
Agriculture.....	Page 6
Precision Agriculture.....	Page 7
Animal Science.....	Page 7
Education Professions.....	Page 8
Health Sciences.....	Page 10
CNA.....	Page 11
EMT.....	Page 11
Public Safety.....	Page 12
Fire & Rescue.....	Page 13

Ivy Tech Community College Partnership

Ivy Tech Community College partners with CCHS to offer students an opportunity to obtain dual credit, which means eligible students are able to earn college credit while still in high school.

Dual Credit

Students take courses at their high school where they may earn both high school and college credits, tuition-free. A complete listing of dual credit opportunities is available in the CCHS Course Description Guide or talk to your school counselor.

Dual Enrollment

Students may take courses face-to-face, virtually and online with Ivy Tech Fort Wayne where they may earn both high school and college credit. Cohort dual enrollment programming may be established at CCHS. Dual enrollment supports dual credit processes and allows for stackable credential completion. Ivy Tech's Dual Credit College Advisor provides guidance to students for college and career conversations to assist them in meeting their goals and transition steps. Connect to learn more about various I-Complete Scholarship opportunities.

Ivy Tech Community College credits transfer. It is advised that students check with the Admissions Office of the academic institution where they want to transfer to determine which credits transfer. Visit www.TransferIN.net for more details.

For additional information or questions, please contact your school counselor and/or Ivy Tech's Dual Credit College Advisor at 260.330.6006.



ADVANCED MANUFACTURING



ARE YOU CURIOUS HOW PRODUCTS ARE CREATED?

Consider a career in Advanced Manufacturing

WHAT IS IT?

Manufacturing is the process of designing, making, installing and maintaining various products, whether cars or medical devices, furniture or electronics, or even food. Manufacturing has become much more automated today because of advancements in technology. Career paths now require more technology and computer skills, but are in very high-demand.

WHAT WILL I DO?

Manufacturing careers vary depending on the industry and skill level. Automotive and medical products are more automated, where automation technicians are leveraging computers to manage the assembly line. Installers are performing more manual work, assembling products directly with their hands as they move through the assembly line.

LEADS TO THESE JOBS

- CNC Programmer
- Fabricator
- Industrial Engineer
- Industrial Machinery Mechanic
- Machine Operator
- Machinist
- Mechatronics Technician
- Welder

Possible Outcomes

Dual Credit Offered

- MPRO 100
- MPRO 102
- MPRO 106
- MPRO 122
- MPRO 201

Certifications Offered

- MSSC Safety

What are some examples of what I might do in this Pathway?

In Manufacturing classes at CCHS, students learn sketching, drafting, CAD-CAM techniques to design and create projects from conception to production by means of CNC Milling, CNC Turning, CNC Lasering and 3D-modeling. Students use PLC's, programming and robotics to simulate Manufacturing production.



AUTOMATION & ROBOTICS

Automation & Robotics are two of the fastest growth career paths today in the manufacturing industry, using computer-aided design, drafting and manufacturing systems to produce materials and products more efficiently.



WELDING TECHNOLOGY

Welding is the process of joining or melting two or more pieces of metal, plastic or glass together as part of the manufacturing process of building a larger structure, product or

STUDYING ADVANCED MANUFACTURING LEADS TO THESE IN-DEMAND OCCUPATIONS IN INDIANA

Education Level	Occupation	Median Salary	Job Growth Over Next 10 years	Job Openings Projected Over Next 10 Years
High School + Certifications	CNC Operator	\$35,560	11%	8,311
	Welder	\$38,080	11%	17,507
	Machinist	\$40,610	9%	20,009
	CNC Programmer	\$45,610	27%	1,262
	Industrial Machinery Mechanic	\$49,700	11%	13, 138
	Industrial Engineering Technician	\$50,780	7%	2,679
	Electrical & Electronics Repair	\$50,890	3%	967
	Electrical & Electronics Engineering	\$61,222	6%	2,096
Associate Degree	Electrical & Electronics Drafter	\$60,870	12%	315



WHAT IS IT?

Agriculture, Food and Natural Resources workers produce and sell a variety of products ranging from food to raw materials and also help manage our environment. Agribusiness produce livestock, field crops, and fruit and vegetable produce, along with processing these products and marketing them for consumers to purchase. People working in natural resource focus on preserving the soil, water and air.

WHAT WILL I DO?

Careers can range from working in an innovative scientific laboratory to being outdoors raising plants and animals. Greenhouse workers grow plants, flowers, trees and shrubs for residential or commercial use. Environmental scientists and technicians study and analyze our land and water to maintain a balance between industry growth and sustainability.

LEADS TO THESE JOBS

- Agribusiness Manager
- Biotechnology Researcher
- Environmental Scientist
- Food Scientist
- Greenhouse Worker
- Wildlife/Conservation Agent
- Wind Turbine Technician

Possible Outcomes

Dual Credit Offered

- AGRI 103
- AGRI 106
- AGRI 107
- AGRI 108
- AGRI 116
- AGRI 164

What are some examples of what I might do in this Pathway?

In Agriculture classes at CCHS, students are challenged to learn about our environment and how we may improve current processes to ensure adequate yields for tomorrow.

Whether a student is interested in agribusiness, plants, animals or precision agriculture, the CCHS Agriculture has courses and programs available.



PRECISION AGRICULTURE

Precision Agriculture is a more sustainable farming method that leverages technology to increase crop yields while lowering dependence on excessive land use, water, fertilizer, herbicides and insecticides.



AGRISCIENCE - PLANTS OR ANIMALS

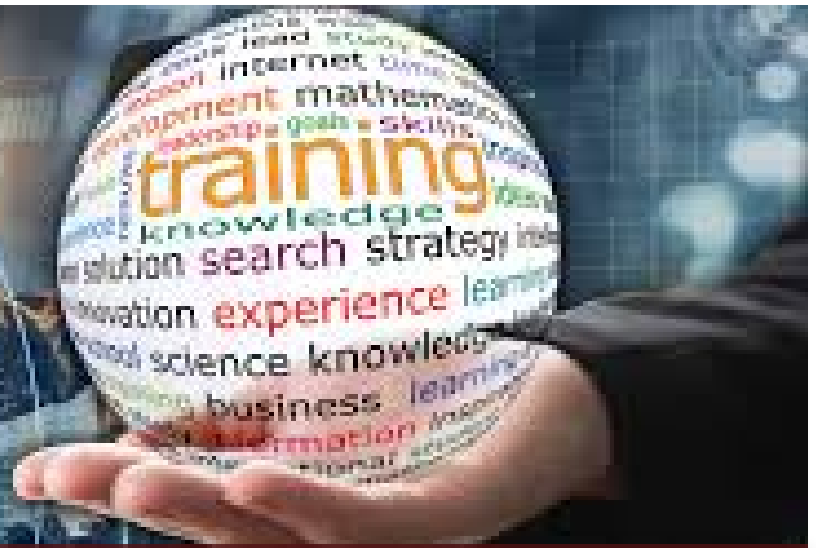
Agriscience is the application of scientific principles like biology, chemistry, and environmental science, and how it relates to agriculture, including soil cultivation, weather patterns, crop production, livestock management and sustainability.

STUDYING AGRICULTURE , FOODS & NATURAL RESOURCES LEADS TO THESE

IN-DEMAND OCCUPATIONS IN INDIANA

Education Level	Occupation	Median Salary	Job Growth Over Next 10 years	Job Openings Projected Over Next 10 Years
High School + Certifications	Veterinary Technician	\$29,760	27%	1,637
	Farm Equipment Mechanic and Service Technician	\$37,590	11%	1,708
	Agriculture and Food Service Technician	\$40,440	6%	854
	Horticulture Supervisor	\$47,220	15%	1,108
Associate Degree	Precision Agriculture Technician	\$45,520	12%	1,457
	Environmental Science and Protection Technician	\$47,530	18%	927
Bachelor's Degree	Environmental Scientist and Specialist	\$60,340	18%	988
	Food Scientist and Technologist	\$67,320	7%	553

EDUCATION PROFESSIONS



DO YOU LIKE TO LEARN?
DO YOU LOVE HELPING CHILDREN?
Check out careers in Education Professions.

WHAT IS IT?

Education is the teaching and training of people, usually younger ages from pre-school through high school or college. Every young person deserves education, which is required in most states through high school, so there will always be demand for teachers. Education workers most frequently work in traditional schools, but can also be found in sports activities, libraries, churches and after-school activities.

WHAT WILL I DO?

Teachers educate children, guiding them through their early years, serving as mentors, and training them on both traditional skills like writing, math and science, as well as personal skills like respecting others, time management, and personal responsibility. A background in education can also lead to becoming a counselor, librarian, coach and even principal.

LEADS TO THESE JOBS

- Administrator
- Career and Technical Education Instructor
- High School Teacher
- Librarian
- Pre-School Teacher
- Principal
- Secondary Teacher
- Teaching Aide

Possible Outcomes

Dual Credit Offered

- EDUC 101
- EDUC 121
- EDUC 230
- EDUC 233

Certifications Offered

- AED
- CPR
- First Aid

What are some examples of what I might do in this Pathway?

In Education Professions, students learn in the classroom and then apply their learning to a classroom within our surrounding area. This application of learning ensures students are able to transfer theoretical concepts to reality.

Students may work with children from kindergarten to grade 8 with the supervision of a cooperating teacher. Ideally, students complete this program over two years to explore what grade levels they are interested.



EDUCATION CAREERS

Education Careers exist in kindergarten, elementary and middle school, high school, college and beyond. Teachers educate their students in traditional skills like writing, language, math and science, as well as personal skills like time management, personal

CTE Fact:



Almost 85% of families in CTE are satisfied with opportunities for both career exploration and skill building compared to only 54% of families considering CTE.

STUDYING EDUCATION AND TRAINING LEADS TO THESE IN-DEMAND OCCUPATIONS IN INDIANA

Education Level	Occupation	Median Salary	Job Growth Over Next 10 years	Job Openings Projected Over Next 10 Years
High School + Certification	Teacher Assistant	\$22,620	7%	27,801
Associate Degree	Preschool Teacher	\$26,900	9%	5,865
Bachelor's Degree	Special Education Teacher, Kindergarten and Elementary School	\$48,980	6%	2,031
	Elementary School Teacher	\$49,250	6%	20,454
	Middle School Teacher	\$51,400	6%	7,419
	Secondary School Teacher	\$51,870	6%	14,033
	School and Guidance Counselor	\$51,950	11%	4,658

HEALTH SCIENCES



**DO YOU LIKE TO HELP PEOPLE?
ARE YOU INTERESTED IN THE HUMAN ANATOMY?
ARE YOU PATIENT AND EMPATHETIC?**

If so, explore a career in Health Sciences.

WHAT IS IT?

Healthcare careers focus on the health and well-being of patients, and advancing the cause of medicine. Work is performed generally in hospitals or clinics, but can also be found in offices, nursing facilities and increasingly, people's homes. Technology has been transforming healthcare in recent years, allowing patients to receive better care and live longer, more productive lives.

WHAT WILL I DO?

Physicians, nurses and therapists work directly with patients to diagnose, treat and comfort their patients. Researchers, biomedical engineers and technicians work in the laboratory developing new cures for disease. You might also work as a medical assistant or health information specialist that keeps history of medical records for insurance or future use.

LEADS TO THESE JOBS

- Certified Nursing Assistant
- Dental Hygienist
- Doctor
- Emergency Medical Tech
- Medical Assistant
- Personal Trainer
- Pharmacy Technician
- Physical Therapy Asst
- Registered Nurse

Possible Outcomes

Dual Credit Being Pursued

- Ivy Tech HLHS 100
- Ivy Tech HLHS 101
- Ivy Tech HLHS 107
- Ivy Tech PARM 102

Certifications Offered

- Indiana State Department of Health Certified Nurse Aide Certification
- EMT - Basic

What are some examples of what I might do in this Pathway?

In Health Sciences, students learn about medical terminology, anatomy and physiology of the human body, professionalism and communication skills in the workplace, infection control, healthcare career options, healthcare industry workings and how to provide basic hands-on care of a patient/resident. Students may earn an Indiana State Department of Health Certified Nursing Assistant certification. Students learn while working alongside employees at Miller's at Oak Pointe.



PRE-NURSING / HEALTHCARE SPECIALIST

Nursing careers are on the front-line of patient care, interacting with patients most frequently. Becoming a Certified Nursing Assistant is the first step in the nursing career path. They monitor vital signs of the patient, taking temperature and blood pressure and check medicine levels

CTE Fact:



Almost 90% of families enrolled in CTE are satisfied with their education experience, compared to 75% of families not in CTE.

STUDYING HEALTH SCIENCES LEADS TO THESE IN-DEMAND OCCUPATIONS IN INDIANA

Education Level	Occupation	Median Salary	Job Growth Over Next 10 years	Job Openings Projected Over Next 10 Years
High School + Certification	Nursing Assistant	\$25,000	11%	40,167
	Pharmacy Technician	\$29,860	9%	8,721
	Medical Assistant	\$30,740	28%	18,807
	Emergency Medical Technician & Paramedic	\$33,140	14%	4,595
Associate Degree	Licensed Practical or Vocational Nurse	\$41,540	12%	14,071
	Physical Therapist Assistant	\$55,950	32%	3,674
	Dental Hygienist	\$67,230	19%	4,236
Bachelor's Degree	Athletic Trainer	\$44,460	19%	437
	Dietician and Nutritionist	\$55,680	16%	1,037



HAVE YOU ALWAYS WANTED TO BE A POLICE OFFICER OR FIREFIGHTER?

Explore careers in Public Safety

WHAT IS IT?

Public Safety professionals are responsible for serving and protecting their communities and enforcing laws. The judicial system is responsible for upholding the law and punishing those who break the law. Public safety jobs keep people safe from crime and danger. Security careers are often found in the private sector, providing additional safety and security at businesses, schools and larger events.

WHAT WILL I DO?

Police officers keep their local communities safe, many times proactively preventing crimes and danger before they happen. Firefighters not only put out fires, but also recommend safety times to local households and businesses. Security guards make sure private businesses are safe and secure. A corrections officer is responsible for monitoring prisoners or those recently released from jail.

LEADS TO THESE JOBS

- Corrections Officer
- Firefighter
- Judge
- Lawyer
- Paralegal
- Police Officer
- Security Guard

Possible Outcomes

Dual Credit Being Pursued

- Ivy Tech HSPS 106
- Ivy Tech HSPS 121
- Ivy Tech HSPS 165
- Ivy Tech HSPS 167

Certifications Offered

- Mandatory Firefighter
- Hazardous Materials Awareness & Operations
- Technical Rescue Awareness
- Firefighter I and II
- CPR

What are some examples of what I might do in this Pathway?

The Fire Academy at Columbia City High School is heavy in repetitive, hands-on learning. The repetition creates muscle memory, which allows a firefighter to perform under pressure and under intense working conditions. Students receive training that is no different than that of a newly hired firefighter for the City of Fort Wayne to Indianapolis. They work on firetrucks, enter live fire training, operate fire hoses and use the Jaws of Life to cut cars apart in addition to many other training opportunities.



FIRE AND RESCUE

Fire and Rescue workers are responsible for controlling and putting out fires in their communities. They also respond to emergencies where life, property, or the environment at risk.

CTE Fact:

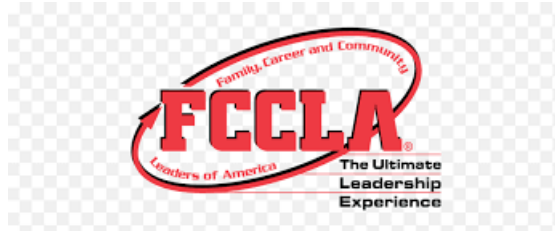


Over 80% of families currently participating in CTE are **satisfied** with opportunities to **earn college credit** and **take advanced classes** compared to 60% of perspective families.

STUDYING LAW,PUBLIC SAFETY, CORRECTIONS AND SECURITY LEADS TO THESE IN-DEMAND OCCUPATIONS IN INDIANA

Education Level	Occupation	Median Salary	Job Growth Over Next 10 years	Job Openings Projected Over Next 10 Years
High School + Certification	Security Guard	\$27,000	7%	40,167
	Police, Fire and Ambulance Dispatcher	\$35,570	9%	2,126
	Firefighter	\$46,620	8%	5,855
	Police and Sheriff's Patrol Officer	\$51,960	7%	8,469
Associate Degree	Paralegal and Legal Assistant	\$45,560	19%	5,114
	Security Manager	\$70,740	7%	10,468

Career and Technical Service Organizations at Columbia City High School



Career and Technical Student Organizations (CTSO) enhance student learning through contextual instruction, leadership and personal development, applied learning and real world application.

CTSOs work as an integral component of the classroom curriculum and instruction, building upon employability and career skills and concepts through the application and engagement of students in hands-on demonstrations and real life and/or work experiences through a Career and Technical Education (CTE) program.

CTSOs help guide students in developing a career path, a program of study and provide opportunities in gaining the skills and abilities needed to be successful in those careers through CTSO activities, programs and competitive events.

- *CTSOs.org*

MAKING AN IMPACT

With more than 2 million student members combined, these 11 organizations have a definite impact on student's overall college and career readiness.



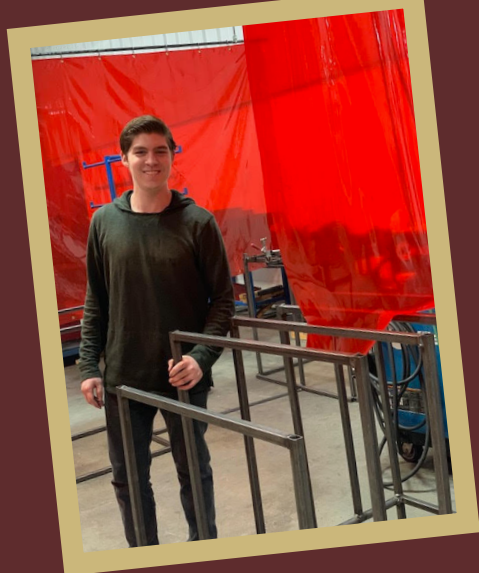
Students who participate in CTSOs demonstrate higher levels of academic engagement and motivation, civic engagement, career self-efficacy and employability skills than other students.



According to the National Research Center for Career and Technical Education, participating in leadership and professional development activities in a CTSO raises students' educational aspirations.



Students who participate in school organizations in 10th grade have higher grade point averages and are more likely to be enrolled in college at 21 than other students.



COLUMBIA CITY HIGH SCHOOL

offers more CTE courses



- Accounting
- Banking & Investments
- Commercial Photography
- Computer Science
- Entrepreneurship
- Graphic Design
- Interactive Media
- Marketing



- Adult Roles & Responsibilities
- Child Development
- Fashion & Textiles
- Human & Social Services
- Human Development
- Medical Terminology
- Nutrition & Wellness



- Ag Power & Structure
- Agribusiness
- ALS Animals
- ALS Foods
- ALS Plant and Soil Science
- Engineering Design
- Engineering Essentials
- Horticulture
- Information Technology
- Landscape Management



Jennifer Reiff
*Director of Innovation (CTE)
& Technology*
reiffjl@wccsonline.com

Lori Heuer
Talent Development Director
heuerla@wccsonline.com

Braden Mullett
CCHS Principal
mullettbn@wccsonline.com