

Information Technology

PATHWAY: Computer Science and Programming

Do you enjoy creative problem-solving, puzzles, code, or improving ideas?
 Is using technology to help people an exciting concept to you? Would you like to create designs from people through a workable code?

COURSES IN YELLOW are pathway concentrator courses and must be finished with a **C- average or above** to meet Indiana's 3rd requirement to graduate.
COMPLETE ALL COURSES below with a B- or above to graduate with **Academy recognition**.

COURSE NAME	GRADES AVAILABLE	LENGTH	DUAL (COLLEGE) CREDITS POSSIBLE	FULFILLS CORE 40 CREDITS AS...
Technology Sandbox (Intro to Computer Science)	9, 10, 11, 12	1 Semester		
PLTW HONORS INTRO TO CODING (COMPUTER SCIENCE I) (REQUIRED CONCENTRATOR COURSE)	9, 10, 11, 12	YEAR	3	SCIENCE & QUANTITATIVE REASONING
PLTW COMPUTER SCIENCE PRINCIPLES (AP COMPUTER SCIENCE II) OR PLTW COMPUTER SCIENCE A: JAVA (AP COMPUTER SCIENCE II) (PICK ONE REQUIRED CONCENTRATOR COURSE)	10, 11, 12	YEAR		SCIENCE & QUANTITATIVE REASONING SCIENCE & QUANTITATIVE REASONING
Information Technology Support	10, 11, 12	Year		

State- and Industry-Recognized Certification:
 CompTIA A+

Must earn a specified certification or dual credit to graduate with Academy recognition. Apply your senior year.

If you would like to take more courses related to this pathway, check out the courses listed below!

- 3D Computer Animation and Visualization (Video Game Design)
- 3D Computer Animation and Visualization (Advanced Video Game Design)
- **Business Professionals of America Club (BPA)**
- Coding Lab C++/xCode (Computer Science III)
- Digital Applications and Responsibility A
- Digital Applications and Responsibility B

- Networking I
- Networking II: Infrastructure
- Networking II: Servers
- **Robotics Club**
- Web Design
- Work-Based Learning Capstone

Possible Careers Requiring 0-4 Years of Additional Training or Education	
<ul style="list-style-type: none"> • Associate Digital Campaigner • Computer Programmer • Computer Support Specialist • Digital Marketer • Health Information Technician 	<ul style="list-style-type: none"> • Social Media Coordinator • Systems Analyst • Technical Recruiter • Web Content Specialist • Web Developer

Possible Careers Requiring 4+ Years of Additional Training or Education	
<ul style="list-style-type: none"> • App Developer • Artificial Intelligence Engineer • Computer Information Researcher • Data Scientist • Database Administration 	<ul style="list-style-type: none"> • Game Developer • Health Information Technician • Instructional Designer • Machine Learning Engineer • Software Engineer

Local Industry Partners			
Lake City Bank Paragon Medical	Peakey Enterprises, LLC Super Geeks and Gaming	Tecomet Warsaw Community Schools	Zimmer-Biomet

THREE GRADUATION REQUIREMENTS	
THREE REQUIREMENTS	OPTIONS (Pick <u>at least one</u> in EACH box)
1 HIGH SCHOOL DIPLOMA Must complete <u>at least one</u> item Check all that apply	<input type="checkbox"/> Core 40 <input type="checkbox"/> Core 40 with Academic Honors <input type="checkbox"/> Core 40 with Technical Honors
2 EMPLOYABILITY SKILLS Must complete <u>at least one</u> item Check all that apply	<input type="checkbox"/> Project-Based Learning Experience <input type="checkbox"/> Service-Based Learning Experience <input type="checkbox"/> Work-Based Learning Experience
3 POSTSECONDARY-READY COMPETENCIES Must complete <u>at least one</u> item Check all that apply	<input type="checkbox"/> Complete: Concentrator courses and their prerequisite courses (in YELLOW) from a pathway Maintain a C- average minimum in the CONCENTRATOR COURSES for that pathway Chosen pathway: _____ <input type="checkbox"/> Core 40 with Technical Honors diploma <input type="checkbox"/> Core 40 with Academic Honors diploma <input type="checkbox"/> AP/Dual Credit: Must earn a C- <u>average</u> or higher in at least three courses <input type="checkbox"/> ACT with college-ready benchmarks <input type="checkbox"/> SAT with college-ready benchmarks <input type="checkbox"/> ASVAB with minimum AFQT score to qualify for placement into one of the branches of the US military <input type="checkbox"/> State- and Industry-recognized credential or certification <input type="checkbox"/> State-, Federal-, or Industry-recognized apprenticeship

_____ 's Four-Year Plan

GRAD	English	Math	Science	Social Studies	Physical Education/ Health or 3 FACS	Elective Courses	Pathway and Academy Courses	Summer School Credits
		Fill blanks with electives	Fill blanks with electives	Fill blanks with electives	Fill blanks with electives		Fill blanks with electives	
7/8	Any middle school credits							
9	English 9	Algebra I	Biology I	World History Civ. A or B (9-10th grade)	Preparing for College & Careers			Session A before 9 th grade
	(continued)	(continued)	(continued)	World History Civ. A or B (9-10th grade)	PE credit			Session B before 9 th grade
10	English 10	Geometry	Chemistry I, or ICP, or Physics I		PE credit or waiver			Session A before 10 th grade
	(continued)	(continued)	(continued)		Health or 2 other qualifying FACS credits			Session B before 10 th grade
11	English 11	Algebra II	Qualifying Core 40 science of your choice	U.S. History				Session A before 11 th grade
	(continued)	(continued)	(continued)	(continued)				Session B before 11 th grade
12	English 12	Quantitative reasoning or math recommended		Government				Session A before 12 th grade
	(continued)			Economics (fulfills requirement for quantitative reasoning)				Session B before 12 th grade