



2026-2027

CAREER TECHNICAL EDUCATION CONCENTRATORS



**HERITAGE HILLS HIGH SCHOOL
WWW.HHHS.NSPENCER.K12.IN.US
3644 E. CR 1600 N.
LINCOLN CITY, IN 47552**

Advanced Manufacturing

Year One Principles of Advanced Manufacturing



Ivy Tech ADMF 101

Year Two Advanced Manufacturing Technology



Ivy Tech ADMF 102

Year Two or Three Mechatronics



- Core Skills
- Problem Solving
 - Communication
 - Attention to detail
 - Measuring
 - Testing
 - Safety
 - Machining
 - Programming
 - Automation
 - Operating Skills
 - Project management
 - Analytical Skills



The Patriot Academy option is available in Advanced Manufacturing if students complete these three courses prior to senior year. If the student is chosen as a Patriot Academy student, he or she will be placed with a local business partner as a paid intern for one full school day per week senior year in manufacturing. These students will gain invaluable experience and possibly make a future career connection of employment.

Careers

CNC Operator Welder Production Operator Robotics Technician PLC Programmer Quality Control Safety
Coordinator Production Supervisor Industrial Machinery Mechanic Supply Chain Specialist Robotics Engineer CAD
Designer Process Improvement Specialist Technical Sales Specialist

Ag Mechanical and Engineering

Year One Principles of Agriculture



Ivy Tech AGRI
100

Year Two Ag, Power, Structure and Technology



Ivy Tech AGRI
106, 128

Year Two or Three Ag Structures Fabrication and Design



(This class can be taken simultaneously with Ag Power, Structure and Technology if the student is a junior).

- Core Skills
- Operations and control
 - Repairing
 - Equipment Maintenance
 - Equipment Selection
 - Safety
 - Operation Monitoring
 - Quality Control Analysis
 - Electrical, Plumbing,
 - Concrete, Carpentry,
 - Welding
 - Utilize Precision Tools
 - Manage Projects

*Speak to your counselor about internship opportunities if you have completed all three courses.

Careers

Agricultural Equipment Technician Diesel Mechanic Small Engine Repair Technician Carpenter Electrician Plumber
Concrete Technician Welder Equipment Customization Specialist Agricultural Engineer Farm Manager Grain Facility
Technician Irrigation Specialist Agricultural Equipment Sales Representative Parts and Service Coordinator

Agriscience: Animals



Year One Principles of Agriculture



Ivy Tech AGRI
100

Year Two or Three Advanced Life Science Foods



Ivy Tech AGRI
108

Year Two or Three Animal Science



Ivy Tech AGRI 103
(This class can be
taken simultaneously
with ALS Foods).

CORE SKILLS

- Understanding Animal Behavior
- Nutrition
- Record Keeping
- Equipment Maintenance
- Food Safety
- Quality Control Analysis
- Management of Material Resources
- Management of Personnel Resources
- Data Tracking



*The Patriot Academy option is available in Agriscience: Animals if students complete these three courses prior to senior year. If the student is chosen as a Patriot Academy student, he or she will be placed with a local business partner as a paid intern for one full school day per week senior year in Agriculture. These students will gain invaluable experience and possibly make a future career connection of employment.

CAREERS

Veterinarian Breeding/Genetics Specialist ■ Farmer ■ Agricultural Equipment Operator Food Scientist Agribusiness Manager ■
Biotechnology Researcher Environmental Engineering Tech ■ Farm Product Buyer Park Naturalist ■ Wildlife/ Conservation Agent
Wind Turbine Technician ■ Zoologist

AUTOMOTIVE SERVICES



Year One
Principles of
Automotive Services
Ivy Tech AUTI 100, 111

Year Two
Brake Systems,
Steering and Suspensions
This is a two period class.
Ivy Tech AUTI 121, 122, 145

Year Three
Automotive Service
Capstone
This is a two period class.
Ivy Tech AUTI 141, 131

*The Patriot Academy option is available in Automotive Services if students complete the Principles of Automotive Services, Brake Systems, and Steering and Suspensions prior to senior year. If the student is chosen as a Patriot Academy student, he or she will be placed with a local business partner as a paid intern for one full school day per week senior year in Automotive. These students will gain invaluable experience and possibly make a future career connection of employment.

Core Skills

Mechanical Skills
Troubleshooting
Problem Solving
Strategic Thinking
Knowledge of systems and computer controls
Dexterity
Customer Service
Mechanical Diagnosis

Careers

Recreation Vehicle Service Technician
Automotive Service Technician
Mechanic
Diesel Service Technician
Automotive Body Repairer
Aircraft Mechanic and Service Technician
Mobile Heavy Equipment Mechanic
Automotive Electrician
Auto Sales Manager
Automotive Engineer
Auto Parts Manager



Biomedical Sciences and Technology

Year One
Principles of Biomedical Sciences



Year Two
Human Body Systems or Anatomy and Physiology



Year Three
Medical Interventions



Core Skills

- Operations and control
- Repairing
- Equipment Maintenance
- Equipment Selection
- Operation Monitoring
- Quality Control Analysis
- Science
- Management of Material Resources
- Management of Personnel Resource

*Students may take Patriot Medical Exploration as a senior if they have taken a Biomedical/Health Science class previously. This course will give students rotational shadowing experiences in the medical industry.

Careers

Nursing Assistant Pharmacy Technician Medical Assistant Emergency Medical Technician and Paramedic
Licensed Practical Nurse Physical Therapist Assistant Dental Hygienist Athletic Trainer Dietician and Nutritionist
Medical Doctor Forensic Scientist

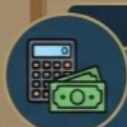
Business Administration

Year One
Principles of Business Management



Year Two or Three

Accounting Fundamentals



Year Two or Three

Marketing Fundamentals



(This class can be taken simultaneously with Accounting Fundamentals)

Core Skills

- Leadership
- Communication
- Financial Management
- Customer Service
- Organized
- Computer literacy
- Interpersonal communication
- Data analysis

*Speak to your counselor about internship opportunities if you have completed all three courses.

Careers

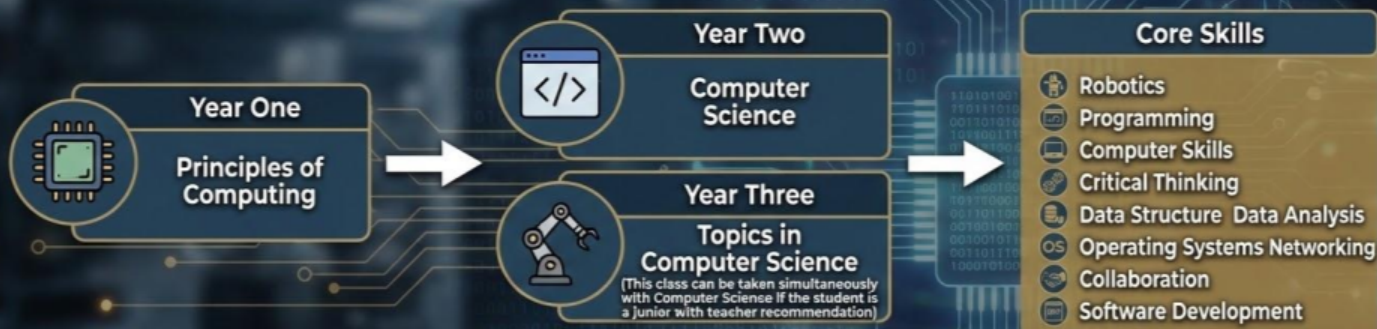
Real Estate Sales Agent
Logistician
Entrepreneur

Marketing Manager
Sales Manager
Market Research Analyst
Marketing Specialist
Human Resources

Accountant
Financial Advisor
Training and Development Specialist



Computer Science



*Speak to your counselor about internship opportunities if you have completed all three courses.

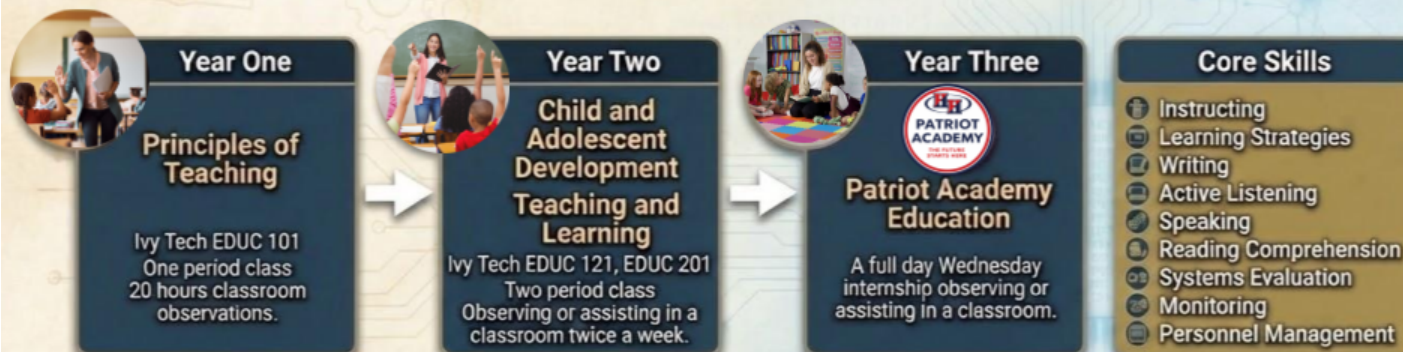
Careers

Computer User Support Specialist
Web Developer
Network and Computer Systems

Computer Network Architect
Computer Systems Analyst
Information Security Analyst
Software Developer

Computer and Information Systems Manager
Video Game Designer
IT Project Manager
App Developer

Education



Students may apply to do Cooperative Education/Work Based Learning senior year which releases them from Heritage Hills for 2-3 periods a day. This can be a stand alone experience or in addition to Patriot Academy Education. There is not a requirement to have completed the entire pathway of Education courses.

Careers

Teacher Assistant
Preschool Teacher
Special Education Teacher
Elementary School Teacher

Middle School Teacher
Secondary School Teacher
Speech Language Pathologist
School Guidance Counselor

School Administrator
School Psychologist
Reading Specialist
Curriculum Developer

ENGINEERING

YEAR ONE

Introduction to Engineering



Ivy Tech DESN
101, 113

YEAR TWO

Principles of Engineering



Ivy Tech DESN
105

YEAR TWO OR THREE

*Civil Engineering
Architecture*



Ivy Tech DESN 105
(This class can be taken simultaneously with Advanced Manufacturing Technology).

CORE SKILLS

- ✓ Problem Solving
- ✓ Measurement
- ✓ Modeling
- ✓ Communication
- ✓ Attention to detail
- ✓ Troubleshooting
- ✓ Product design
- ✓ Programming
- ✓ Risk Assessment
- ✓ Collaboration
- ✓ Innovation
- ✓ Project management
- ✓ Analytical Skills



*The Patriot Academy option is available in Engineering if students complete these three courses prior to senior year. If the student is chosen as a Patriot Academy student, he or she will be placed with a local business partner as a paid intern for one full school day per week senior year in Engineering. These students will gain invaluable experience and possibly make a future career connection of employment.

CAREERS

Industrial Engineer, Engineering Technician, Mechanical Engineer, Electrical Engineer, Chemical Engineer, Health and Safety Engineer, Civil Engineer, Biomedical Engineer, Agricultural Engineer, CAD Designer, Testing and Validation Specialist, Product Manager

Fine Art: Band

Year One



Beginning/
Intermediate
Concert Band

Year Two



Advanced
Concert Band

Any Year



Principles of
Business Management

Careers

- Band Director, Teacher, Private Lesson Instructor,
- Professional Musician, Audio Production,
- Recording Artist, Military Band Member, Music
- Producer, Composer, Recording Technician

Core Skills

- ✓ Creativity, Performing, Listening, Music
- ✓ Notation, Perspective, Composition,
- ✓ Rhythm, Collaboration, Memorization,
- ✓ Critical Thinking, Pitch and tone

Fine Art: Choir

Year One



Beginning Chorus

Year Two



Intermediate/Advanced Chorus

Any Year



Principles of Business Management

Careers



Teacher, Recording Artist, Private Lesson Instructor, Audio Production, Actor, Stage Manager, Choreographer, Musical Theater Performer, Church Musician, College Vocal Professor, Tour Manager, Podcast or Media Voice

Core Skills

Creativity, Singing, Acting, Breathing, Tone Production, Collaboration, Posture, Reading Music, Rhythm, Following a Conductor, Listen and Blend, Memorization, Performance



Fine Art: Theatre

Year One



Theatre Arts/Theatre Production

Year Two



Advanced Theatre Arts

Any Year



Principles of Business Management

Careers

Film/TV Actor, Voice Actor, Teacher, Talent Agent, Improvisational Performer, Stage Manager, Choreographer, Lighting or Sound Technician, Costume Creation, Theatre Director, Set Designer, Playwright

Core Skills

Blocking and Movement, Character Development, Acting, Memorization, Voice Projection, Perspective, Collaboration, Articulation, Public Speaking, Stagecraft, Adaptability, Organization

Fine Art: Visual Art

Year One



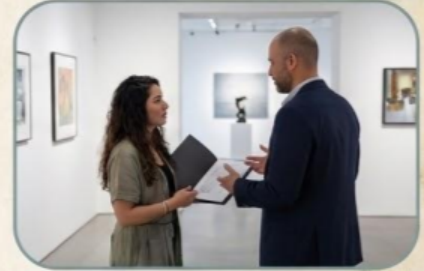
Intro to 2D and 3D
Art/Digital Design

Year Two



Advanced 2D and 3D Art

Any Year



Principles of Business
Management

Careers

Fine Artist
Illustrator
Art Teacher/Professor
Art Therapist

Gallery Artist
Muralist
Photographer
Videographer

Interior design
Brand manager
Lighting or Sound
Technician
Costume Creation

Core Skills

Creativity
Drawing
Software Proficiency
Perspective

Proportion
Collaboration
Computer Literacy
Critical Thinking

Framing
Color Theory
Spatial Thinking
Lighting awareness