



CAREERS IN THIS FIELD
CNC Technologist • HVAC Specialist
Industrial Maintenance
Industrial Technologist • Machinist
Quality Manager • Welding

The Industrial Technology program is designed to prepare you for the modern industrial environment. In world class manufacturing facilities, CNC machines and automated equipment fabricate industrial and consumer products. Working in the modern manufacturing facility requires highly specialized skills in industrial maintenance, welding, and HVAC.

HEATING, VENTILATION AND AIR CONDITIONING

This concentration will prepare you to install and repair heating, air conditioning, refrigeration, and ventilation systems.

INDUSTRIAL ELECTRICIAN *(certificate only)*

Leads to employment, taking the National Electrical Code certification exam, and/or completing an AAS degree in Industrial Technology.

MAINTENANCE

This concentration will provide you with a broad range of skills applicable to a variety of jobs in the industrial environment. You will be prepared to install, repair, maintain, and troubleshoot industrial machinery and equipment such as pumps, motors, PLC technology, pneumatic and hydraulic systems, industrial robotics, and production machinery.

MACHINE TOOL *(certificate only)*

Leads to employment, taking a NIMS Machining Level I certification exam and/or completing an AAS degree in Industrial Technology.

POWER PLANT

Ivy Tech's Power Plant concentration helps you learn how modern power plants operate and obtain the skills you need for a career in this field. Instruction includes the technical and safety aspects of plant and facility operations.

WELDING *(certificate only)*

Leads to employment, taking the certification exam in Shielded Metal Arc, GTAW (Gas Tungsten Arc Welding), GMAW (Gas Metal Arc Welding) and other welding processes and/or completing an AAS degree in Industrial Technology.

WELDING

This concentration is designed for you if you are interested in learning welding or upgrading your skills in the various processes. Novices and advanced-level students can benefit from the individualized competency-based program offered. This concentration offers a variety of skill levels in oxyacetylene, arc, MIG, TIG, and welding/cutting processes, using both manual and semi-automatic applications.

ASSOCIATE OF APPLIED SCIENCE (AAS) DEGREE

Two-year Associate of Applied Science degree programs prepare students for careers, career changes and career advancement. AAS programs may also prepare students for transfer to four-year institutions. The program content, which is approximately 30 percent general education, provides depth and breadth in conceptual and professional/technical skills. Professional/technical courses equip students with the skills to obtain employment and to advance in the workforce.

CERTIFICATE (C)

Certificates are sequences of technical and professional courses. They provide access to targeted, short-term workforce training, and completers may sit for specific certification exams. Certificate programs generally take less than one year to complete.

TECHNICAL CERTIFICATE (TC)

One-year Technical Certificate programs provide education in conceptual and technical skills for specific occupations. Each program contains a sequence of required courses in a recognized concentration within a program.

CONCENTRATIONS IN THIS PROGRAM

FLUID POWER *(certificate only)*

Leads to employment in manufacturing or industrial related fields, completion of an AAS degree in Manufacturing and Industrial Technology, and /or taking the National Fluid Power certification exam.

HEATING AND AIR CONDITIONING *(certificate only)*

Leads to employment, taking an Environmental Protection Agency certification exam, and/or completing an AAS degree in Industrial Technology.



SCHOOL OF TECHNOLOGY

INDUSTRIAL TECHNOLOGY

SOUTHWEST

ASSOCIATE OF APPLIED SCIENCE

62-64 Credit Hours

FIRST YEAR

Fall Semester

INDT 102	Introduction to Print Reading
INDT 104	Fluid Power Basics
INDT 106	Introduction to the Workplace and Safety
INDT 113	Basic Electricity
IVYT 1XX	Life Skills Elective
MATH 121	Geometry/Trigonometry

Spring Semester

INDT 103	Motors and Motor Controls
INDT 203	Machine Maintenance & Installation
TECH 104	Computer Fundamentals for Technology
ENGL 111	English Composition
Elective	Math/Science

SECOND YEAR

Fall Semester

INDT 114	Introduction to Welding
INDT 205	Programmable Controllers I
COMM 101	Fundamentals of Public Speaking
PHYS 101	Physics I
Elective	Technical Elective

Spring Semester

INDT 260	Problem Solving and Teamwork
Elective	Technical Elective
Elective	Technical Elective
Elective	Technical Elective
Elective	Humanities/Social Sciences

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To learn more about employment and salary information for careers in this field, visit the U.S. Department of Labor's Bureau of Labor Statistics website at bls.gov and the official career site of the State of Indiana, indianacareerconnect.com.

Ivy Tech Community College is accredited by North Central Association of Colleges and Schools.

