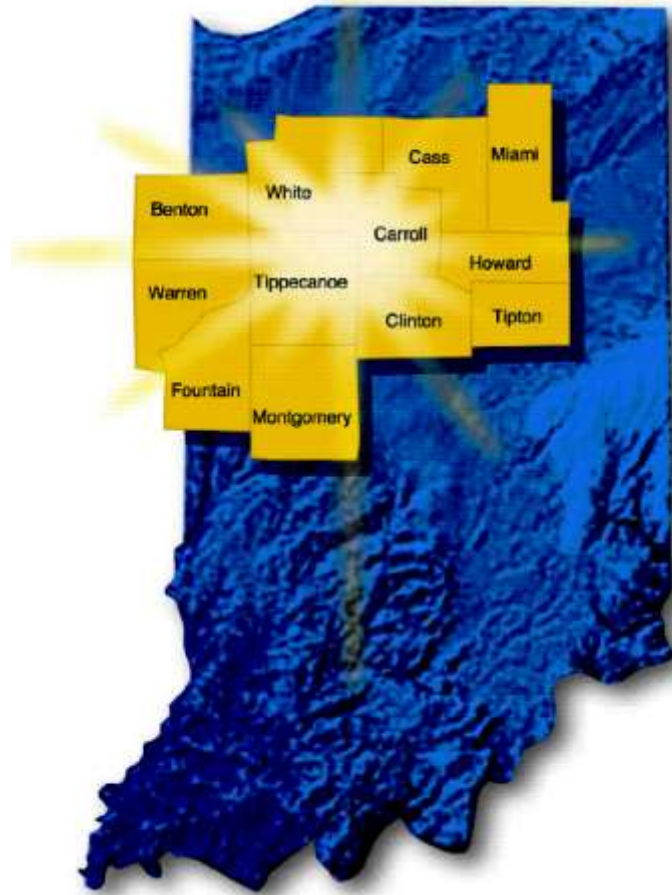


Top 60 Critical Occupations in West Central Indiana

2020 Edition

Career Guide



Produced by

Region 4
WORKFORCE
Board

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Understanding this Career Guide

We are excited to present this updated 2020 Career Guide of the **Top 60 Critical Occupations in West Central Indiana, 2020 Edition**. Each occupation page has the following information to provide a beginning point for your research on the career of your choice.

1. **The Job Description** - This is a brief definition of what the job is all about.
2. **The Tasks** - This section gives information on the duties or tasks that the worker would do if they were to choose this occupation.
3. **Skills** - The skill section provides WorkKeys scores. These scores are the minimum required for the occupation. WorkKeys information is below.
4. **Personal Skills Required for this Career** - This section gives descriptors of the skills necessary to perform the duties listed in the "Tasks" section.
5. **Education** - This section provides information on the specific high school diploma needed and what postsecondary education, if any, is needed to perform this job.
6. **Educational Institutions** - The institutions listed in this section are local schools where the student can access the education necessary to perform the job.
7. **Salaries/Wages** - This section provides a range of wages, from entry to median, for both Indiana and the United States.
8. **Employment Trends** - The projected employment trends for each career can be found in Appendix A.
9. **Website for Further Information** – When available, a specific website for each career is provided, however, you can always access www.stats.bls.gov/oco to find information about the career.
10. **O*NET code** - The O*NET code is provided at the bottom of the page for accessing information about the career in O*NET. The explanation of O*NET is listed below.

What is WorkKeys?

WorkKeys is a national system for teaching and assessing workplace skills that connects "knowing" with "doing" and "learning" with "earning". It is designed to measure workplace skills, relate those skills to specific jobs, identify skill gaps, and help individual workers acquire new skills. ACT (American College Testing), in consultation with employers, educators, and experts in employment and training requirements, has identified generic workplace skills – skills crucial to effective performance in most jobs. The WorkKeys assessment provides a valid method for measuring the skill levels of individuals in eight basic areas:

Applied Math Workplace Docs Graphic Literacy
Applied Technology Workplace Observation

The WorkKeys system enables education and business to work together to strengthen achievement in the workplace. WorkKeys has been designed to help businesses fulfill their needs for workplace skills in hiring and training and to help individuals document their workplace skills.

There are three components of WorkKeys; Job Profiling, Assessment, and Instructional Support.

- Job Profiling is the process of determining the basic skills that a person needs to do a specific job successfully.
- Skill assessment to determine the current skills of individuals in the eight basic areas.
- Instructional support is provided to help educators/trainers assist the learner in improving their skills.

The scores associated with WorkKeys provided with each career, are from the job profiles completed within the State of Indiana. For those jobs not yet profiled in Indiana, the scores from the national profiles were used.

What is O*NET?

The O*NET descriptors, the number at the bottom of each page, i.e. 59-1000.00, refer to categories of occupational information collected and available for O*NET occupations. The careers are listed under the specific Industry, or Job Families. These Job Families are groups of occupations based upon work performed, skills, education, training, and credentials. This site can be accessed at <http://onetonline.org> where specific information on each occupation can be found.

Career information is available on such elements as knowledge, skills, abilities, interests, and work values necessary to perform a particular job. Wages and projected job openings can also be accessed through this site, which compare state to national data. A specific code number is assigned to each occupation within the O*NET system. The O*NET code will have a two digit "family" number at the beginning and a specific number for the occupation itself. For example for the occupation of a Registered Nurse, the O*NET code is 29-1111. The 29 is the "family" code, Health Care Practitioner and Technical and the 1111 is the position of a Registered Nurse. This site provides helpful information for career planning, whether it is for a young person who is planning their high school class schedule, or for an adult who is looking to change careers or possibly attain new skills through additional education. This site is updated regularly so that the information remains current.

Sources of Information and Data:

Identification of careers in demand provided by regional analysis and the Indiana Department of Workforce Development.

The primary sources of information for this project found on the following occupational websites:

- Indiana Career website – <https://www.indianacareerready.com/Home/Index>
- O*NET – www.onetonline.org
- WorkKeys – www.ACT.org/workkeys
- Indiana Department of Workforce Development – www.in.gov/dwd

Indiana's High School Course and Credit Requirements

2020

Background and General Information

In 1994, Indiana's business, industry, labor, higher education, and K-12 communities came together to identify the courses necessary to provide the academic foundation for success in college and the workforce. This common set of courses was called Indiana Core 40.

The academic foundation necessary for success in college, the workforce, military training, and apprenticeship programs have converged. Recognizing that all students need and deserve the academic preparation Core 40 provides, Indiana's Education Roundtable committed to putting policies and strategies in place to move more of Indiana's students out of the general diploma track and into the more rigorous Core 40 curriculum. The resolution called for: (1) improving diploma requirements; (2) making Core 40 the default curriculum for all students with an opt-out provision; (3) adding a Core 40 with Technical Honors diploma; and (4) required Core 40 completion for admission to the State's four-year universities and to receive state financial aid to attend 4-year institutions.

The Indiana State Board of Education has adopted new course and credit requirements for earning a high school diploma. These new requirements went into effect for students entering high school in fall 2006. With these changes, students have the option of earning four diploma types:

- Core 40 with Academic Honors
- Core 40 with Technical Honors
- Core 40
- General

The Indiana General Assembly made completion of Core 40 a graduation requirement for all students beginning with those entering high school fall 2007. The legislation includes an opt-out provision for parents who determine that their student could benefit more from the General Diploma. The legislation also makes Core 40 a minimum college admission requirement for the state's public four-year universities beginning in fall 2011. The Core 40 is not required for admission to the state's two-year colleges, Ivy Tech Community College and Vincennes University. However, both institutions strongly recommend Core 40 as the best preparation for success in their programs.

The requirements for each of these diplomas are attached. General information from the Dept of Education can be accessed online at <https://www.doe.in.gov/school-improvement/student-assistance/core-40-general-information> and at www.learnmoreindiana.org.

INDIANA DIPLOMA INFORMATION

Core 40 Diploma Criteria

English/Language Arts	8 Credits Including a balance of literature, composition, and speech
Mathematics	6 Credits 2 Credits: Algebra I 2 Credits: Geometry 2 Credits: Algebra II (or complete Integrated Math series I, II, and III for 6 credits) Students must take a math course or quantitative reasoning course each year in high school.
Science	6 Credits 2 Credits: Biology I 2 Credits: Chemistry I or Physics I or Integrated Chemistry – Physics 2 Credits: any Core 40 Science course
Social Studies	6 Credits 2 Credits: U.S. History 1 Credit: U.S. Government 1 Credit: Economics 2 Credits: World History/Civilization or Geography/History of the World
Directed Electives	5 Credits World Languages Fine Arts Career/Technical
Physical Education	2 Credits
Health and Wellness	1 Credit
Electives*	6 Credits (College and Career Pathway courses recommended)
40 Total State Credits Required	
Schools may have additional local graduation requirements that apply to all student (not required for students with an IEP)	

*Specifies the number of electives required by the state. High school schedules provide time for many more electives during the high school years. All students are strongly encouraged to complete a Career Academic Sequence (selecting electives in a deliberate manner) to take full advantage of career exploration and preparation opportunities.

with **ACADEMIC HONORS** - *minimum 47 credits*

For the Core 40 with Academic Honors diploma, students must:

- Complete all requirements for Core 40
- Earn 2 additional Core 40 math credits
- Earn 6-8 Core 40 world language credits
- Earn 2 Core 40 fine arts credits
- Complete one of the following:
 - Earn 4 credits in 2 or more AP courses and take corresponding AP exams
 - Earn 6 verifiable transcribed college credits in dual credit courses from the approved dual credit list.6
 - Earn two of the following:
 - A minimum of 3 verifiable transcribed college credits from the approved dues credit list,
 - 2 credits in AP courses and corresponding AP exams,
 - 2 credits in IB standard level courses and corresponding IB exams.
 - Earn a composite score of 1250 or higher on the SAT and a minimum of 560 on math and 590 on the evidence based reading a writing section.
 - Earn an ACT composite score of 26 or higher and complete written section.
 - Earn 4 credits in IB courses and take corresponding IB exams.
- Earn a grade of “C” or above in courses that will count toward the diploma
- Have a grade point average of “B” or above

with **TECHNICAL HONORS** – *minimum 47 credits*

For the Core 40 with Technical Honors diploma, students must:

- Complete all requirements for Core 40
- Earn 6 credits in the college and career preparation courses in a state-approved College & Career Pathway and one of the following:
 - a) Pathway designated industry-based certification or credential, or
 - b) Pathway dual credits from the approved dual credit list resulting in 6 transcribed college credits
- Earn a grade of “C” or above in courses that will count toward the diploma
- Have a grade point average of “B” or above
- Complete one of the following:
 - a) Any one of the options (A-F0 of the Care 40 with Academic Honors
 - b) Earn the following minimum scores on WorkKeys: Workplace Documents, Level6; Applied Math, Level 6; and Graphic Literacy Level 5
 - b) Earn the following minimum score(s) on Accuplacer: Writing 80, Reading 90, Math 75
 - c) Earn the following minimum score(s) on Compass: Algebra 66, Writing 70, Reading 80

INDIANA DIPLOMA INFORMATION

The completion of Core 40 is an Indiana graduation requirement. Indiana’s Core 40 curriculum provides the academic foundation all students need to succeed in college and the workforce.

To graduate with less than Core 40, the following formal opt-out process must be completed:

- The student, the student’s parent/guardian, and the student’s counselor (or another staff member who assists students in course selection) meet to discuss the student’s progress.
- The student’s Graduation Plan (including four year course plan) is reviewed.
- The student’s parent/guardian determines whether the student will achieve greater educational benefits by completing the general curriculum or the Core 40 curriculum.
- If the decision is made to opt-out of Core 40, the student is required to complete the course and credit requirements for a general diploma and the career/academic sequence the student will pursue is determined.

Indiana General High School Diploma Criteria

English/Language Arts	8 Credits
	Credits must include literature, composition, and speech
Mathematics	4 Credits (in grades 9-12)
	2 Credits: Algebra I or Integrated Mathematics I
	2 Credits: any Mathematics course <i>General diploma students are required to earn 2 credits in s Math corse or a Quantitative Reasoning (QR) course during their junior or senior year. QR courses do not count as math credits.</i>
Science	4 Credits
	2 Credits: Biology I
	2 Credits: any Science course <i>At least one credit must be from a Physical Science or Earth and Space Science course.</i>
Social Studies	4 Credits
	2 Credits: U.S. History
	1 Credit: U.S. Government 1 Credit: any Social Studies course
Physical Education	2 Credits
Health and Wellness	1 Credit
College and Career Pathway Courses Selecting electives in a deliberate manner to take full advantage of college and career exploration and preparation opportunities	6 Credits
Flex Credit	5 Credits
	To earn the 5 Flex Credits a student must complete one of the following: <ul style="list-style-type: none"> • Additional elective courses in a College and Career Pathway. • Courses involving workplace learning, such as Cooperative Education or Internship courses.: • High school/college dual credit courses • Additional courses in: <ul style="list-style-type: none"> ✓ Language Arts ✓ Social Studies ✓ Mathematics ✓ Science ✓ World Languages ✓ Fine Arts
Electives	6 Credits
	Specifies the minimum number of electives required by the state. High school schedules provide time for many more elective credits during the high school years.

40 Total State Credits Required

Schools may have additional local graduation requirement that apply to all students

DEFINITIONS

SKILLS:

Active Learning — Understanding the implications of new information for both current and future problem-solving and decision-making.

Active Listening — Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times.

Complex Problem Solving — Identifying complex problems and reviewing related information to develop and evaluate options and implement solutions.

Coordination — Adjusting actions in relation to others' actions.

Critical Thinking — Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.

Equipment Maintenance — Performing routine maintenance on equipment and determining when and what kind of maintenance is needed.

Instructing — Teaching others how to do something.

Judgment and Decision Making — Considering the relative costs and benefits of potential actions to choose the most appropriate one.

Learning Strategies — Selecting and using training/instructional methods and procedures appropriate for the situation when learning or teaching new things.

Management of Financial Resources — Determining how money will be spent to get the work done, and accounting for these expenditures.

Management of Material Resources — Obtaining and seeing to the appropriate use of equipment, facilities, and materials needed to do certain work.

Management of Personnel Resources — Motivating, developing, and directing people as they work, identifying the best people for the job.

Mathematics — Using mathematics to solve problems.

Monitoring — Monitoring/Assessing performance of yourself, other individuals, or organizations to make improvements or take corrective action.

Negotiation — Bringing others together and trying to reconcile differences.

Operation and Control — Controlling operations of equipment or systems.

Operation Monitoring — Watching gauges, dials, or other indicators to make sure a machine is working properly.

Persuasion — Persuading others to change their minds or behavior.

Quality Control Analysis — Conducting tests and inspections of products, services, or processes to evaluate quality or performance.

Reading Comprehension — Understanding written sentences and paragraphs in work related documents.

Repairing — Repairing machines or systems using the needed tools.

Service Orientation — Actively looking for ways to help people.

Social Perceptiveness — Being aware of others' reactions and understanding why they react as they do.

Speaking — Talking to others to convey information effectively.

Systems Analysis — Determining how a system should work and how changes in conditions, operations, and the environment will affect outcomes.

Systems Evaluation — Identifying measures or indicators of system performance and the actions needed to improve or correct performance, relative to the goals of the system.

Time Management — Managing one's own time and the time of others.

Troubleshooting — Determining causes of operating errors and deciding what to do about it.

Writing — Communicating effectively in writing as appropriate for the needs of the audience.

KEY TERMS

Apprenticeship – A formal method of training in a skilled occupation, craft, or trade, during which the apprentice is employed to learn an occupation through a structured program of on-the-job training with related classroom technical instruction

Associate Degree – A two-year degree from a college or university. Some Associate's degrees are transferable toward a Bachelor's degree

Bachelor's Degree – A four-year degree from a college or university. There are two kinds of bachelor's degrees: Bachelor of Arts and Bachelor of Science. Both require a wide variety of courses with concentration in one or two areas

Certification – Completion of a specific training program. Certification does not usually have transferable credit to degree programs

Internship – A form of on-the-job training to gain experience in an occupation. Internships may be paid or unpaid, and many are completed for college credit in a student's major

Licensure – Passing an examination by a licensing agency, such as the state board of education for teaching licenses

Master's Degree – An additional degree in a graduate program after completion of a Bachelor's degree

On-the-job Training – Training given to new employees when they enter a job

Salaries – Yearly rate of pay for work

Vocational Training – Hands-on training in an occupation at a vocational training center

Wages – Hourly compensation for work

Work Experience – Experience gained while working in a related occupation.

Definitions for "Skills" from O*NET.

Definitions for "Key Terms" from Webster's Dictionary.



*Indicates "Green Occupation"



"Bright Outlook Occupations" are expected to grow rapidly in the next several years, or will have large numbers of job openings.

Accountant and Auditor



Description: Examine, analyze, and interpret accounting records to prepare financial statements, give advice, or audit and evaluate statements prepared by others. Install or advise on systems of recording costs or other financial and budgetary data.

Tasks: Accountant: Develop, maintain, and analyze budgets, preparing periodic reports that compare budgeted costs to actual costs. Prepare, examine, or analyze accounting records, financial statements, or other financial reports to assess accuracy, completeness, and conformance to reporting and procedural standards. Review accounts for discrepancies and reconcile differences. Prepare adjusting journal entries. Establish tables of accounts and assign entries to proper accounts. Auditor: Prepare detailed reports on audit findings. Report to management about asset utilization and audit results, and recommend changes in operations and financial activities. Collect and analyze data to detect deficient controls, duplicated effort, extravagance, fraud, or non-compliance with laws, regulations, and management policies. Supervise auditing of establishments, and determine scope of investigation required. Inspect account books and accounting systems for efficiency, effectiveness, and use of accepted accounting procedures to record transactions.

Skills:

WorkKeys Scores WorkKeys explanation on page ii

Applied Math	5	Workplace Docs	4	Graphic Literacy	5
Applied Technology		Workplace Observ.	3		

Personal Skills Required for this Career:

Active Listening, Critical Thinking, Mathematics, Reading Comprehension, Speaking.

Top Industries: [Professional, Scientific, and Technical Services](#)

Education:

- Most of these occupations require a four-year bachelor's degree, but some do not.
- A considerable amount of work-related skill, knowledge, or experience is needed for these occupations. For example, an accountant must complete four years of college and work for several years in accounting to be considered qualified.
- Usually need several years of work-related experience, on-the-job training, and/or vocational training.

Educational Institutions:

- Indiana University Kokomo
- Indiana Wesleyan University
- Ivy Tech Community College
- Purdue University

Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$20.99	\$33.89	\$59.06
	Yearly	\$43,650	\$70,500	\$122,840
Indiana	Hourly	\$19.33	\$30.95	\$50.86
	Yearly	\$40,220	\$64,380	\$105,800

Employment Trends: Appendix A

Website for further information: www.aicpa.org

Administrative Services Manager



Description: Plan, direct, or coordinate one or more administrative services of an organization, such as records and information management, mail distribution, facilities planning and maintenance, custodial operations, and other office support services.

Tasks: Monitor the facility to ensure that it remains safe, secure, and well-maintained. Prepare and review operational reports and schedules to ensure accuracy and efficiency. Set goals and deadlines for the department. Acquire, distribute and store supplies. Analyze internal processes and recommend and implement procedural or policy changes to improve operations, such as supply changes or the disposal of records.

Skills:

WorkKeys Scores WorkKeys explanation on page ii

Applied Math	5	Workplace Docs	5	Graphic Literacy	4
Applied Technology		Workplace Observ.	3		

Personal Skills Required for this Career:

Active Listening, Reading Comprehension, Time Management, Speaking, Coordination

Top Industries: [Government](#) and [Educational Services](#)

Education:

- Most occupations in this zone require training in vocational schools, related on-the-job experience, or an associate's degree.
- Previous work-related skill, knowledge, or experience is required for these occupations. For example, an electrician must have completed three or four years of apprenticeship or several years of vocational training, and often must have passed a licensing exam, in order to perform the job.
- Usually need one or two years of training involving both on-the-job experience and informal training with experienced workers. A recognized apprenticeship program may be associated with these occupations.

Educational Institutions:

- Indiana University Kokomo
- Indiana Wesleyan University
- Ivy Tech Community College
- Purdue University

Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$26.44	\$46.24	\$79.55
	Yearly	\$55,000	\$96,180	\$165,470
Indiana	Hourly	\$23.23	\$38.57	\$64.37
	Yearly	\$48,320	\$80,230	\$133,880

Employment Trends: Appendix A

Website for further information: www.bls.gov/OOH/management/administrative-services-managers.htm

Automotive Service Technician and Mechanic

Description: Diagnose, adjust, repair, or overhaul automotive vehicles.

Tasks: Test drive vehicles and test components and systems, using equipment such as infrared engine analyzers, compression gauges, and computerized diagnostic devices. Examine vehicles to determine extent of damage or malfunctions. See more occupations related to this task. Repair, reline, replace, and adjust brakes. Follow checklists to ensure all important parts are examined, including belts, hoses, steering systems, spark plugs, brake and fuel systems, wheel bearings, and other potentially troublesome areas. Confer with customers to obtain descriptions of vehicle problems and to discuss work to be performed and future repair requirements. Perform routine and scheduled maintenance services, such as oil changes, lubrications, and tune-ups. Repair and service air conditioning, heating, engine cooling, and electrical systems. Test and adjust repaired systems to meet manufacturers' performance specifications. Review work orders and discuss work with supervisors. Tear down, repair, and rebuild faulty assemblies, such as power systems, steering systems, and linkages. Plan work procedures, using charts, technical manuals, and experience. Disassemble units and inspect parts for wear, using micrometers, calipers, and gauges. Repair or replace parts such as pistons, rods, gears, valves, and bearings. Rewire ignition systems, lights, and instrument panels. Repair manual and automatic transmissions Repair or replace shock absorbers.

Skills:

WorkKeys Scores WorkKeys explanation on page ii

Applied Math	4	Workplace Docs	4	Graphic Literacy	4
Applied Technology	4	Workplace Observ.	2		

Personal Skills Required for this Career:

Repairing Equipment Maintenance, Operation Monitoring, Troubleshooting, Critical Thinking

Top Industries: [Retail Trade](#) and [Other Services \(Except Public Administration\)](#)

Education:

- Most occupations in this zone require training in vocational schools, related on-the-job experience, or an associate's degree
- Previous work-related skill, knowledge, or experience is required for these occupations.
- Usually need one or two years of training involving both on-the-job experience and informal training with experienced workers. A recognized apprenticeship program may be associated with these occupations.

Educational Institutions:

- Area Career Centers
- Ivy Tech Community College

Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$11.26	\$19.57	\$32.19
	Yearly	\$23,420	\$40,710	\$66,950
Indiana	Hourly	\$11.45	\$18.14	\$30.04
	Yearly	\$23,810	\$37,730	\$62,480

Employment Trends: Appendix A

Website for further information: <https://www.ase.com/Home.aspx>

Bookkeeping, Accounting, & Auditing Clerk



Description: Compute, classify, and record numerical data to keep financial records complete. Perform any combination of routine calculating, posting, and verifying duties to obtain primary financial data for use in maintaining accounting records. May also check the accuracy of figures, calculations, and postings pertaining to business transactions recorded by other workers.

Tasks: Operate computers programmed with accounting software to record, store, and analyze information. Check figures, postings, and documents for correct entry, mathematical accuracy, and proper codes. Comply with federal, state, and company policies, procedures, and regulations. Operate 10-key calculators, typewriters, and copy machines to perform calculations and produce documents. Receive, record, and bank cash, checks, and vouchers.

Skills:

WorkKeys Scores WorkKeys explanation on page ii

Applied Math	4	Workplace Docs	4	Graphic Literacy	4
Applied Technology		Workplace Observ.	3		

Personal Skills Required for this Career:

Mathematics, Active Listening, Critical Thinking, Reading Comprehension, Speaking

Top Industries: [Professional, Scientific, and Technical Services](#) and [Retail Trade](#)

Education:

- Most occupations in this zone require training in vocational schools, related on-the-job experience, or an associate's degree.
- Previous work-related skill, knowledge, or experience is required for these occupations.
- usually need one or two years of training involving both on-the-job experience and informal training with experienced workers. A recognized apprenticeship program may be associated with these occupations.

Educational Institutions:

- Ivy Tech Community College

Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$12.14	\$19.35	\$29.64
	Yearly	\$25,260	\$40,240	\$61,650
Indiana	Hourly	\$11.37	\$17.78	\$26.31
	Yearly	\$23,650	\$36,990	\$54,720

Employment Trends: Appendix A

Website for further information: www.aicpa.org

Bus and Truck Mechanics and Diesel Engine Specialists



Description: Diagnose, adjust, repair, or overhaul buses and trucks, or maintain and repair any type of diesel engines. Includes mechanics working primarily with automobile or marine diesel engines.

Tasks: Inspect brake systems, steering mechanisms, wheel bearings, and other important parts to ensure that they are in proper operating condition. Use handtools, such as screwdrivers, pliers, wrenches, pressure gauges, or precision instruments, as well as power tools, such as pneumatic wrenches, lathes, welding equipment, or jacks and hoists. Adjust and reline brakes, align wheels, tighten bolts and screws, and reassemble equipment. Examine and adjust protective guards, loose bolts, and specified safety devices. Perform routine maintenance such as changing oil, checking batteries, and lubricating equipment and machinery.

Skills:

WorkKeys Scores WorkKeys explanation on page ii

Applied Math	3	Workplace Docs	4	Graphic Literacy	4
Applied Technology	4	Workplace Observ.	3		

Personal Skills Required for this Career:

Repairing, Troubleshooting, Operation and Control, Operation Monitoring, Critical Thinking

Top Industries: [Transportation and Warehousing](#) and [Wholesale Trade](#)

Education:

- Most occupations in this zone require training in vocational schools, related on-the-job experience, or an associate's degree.
- Previous work-related skill, knowledge, or experience is required for these occupations.
- Usually need one or two years of training involving both on-the-job experience and informal training with experienced workers. A recognized apprenticeship program may be associated with these occupations.

Educational Institutions:

- Area Career Centers
- Ivy Tech Community College

Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$15.00	\$22.76	\$34.70
	Yearly	\$31,200	\$47,350	\$72,180
Indiana	Hourly	\$14.18	\$21.18	\$29.60
	Yearly	\$29,500	\$44,060	\$61,570

Employment Trends: Appendix A

Website for further information: <http://www.nspe.org/>

Carpenter



Description: Construct, erect, install, and repair structures and fixtures of wood, plywood, and wallboard, using carpenter's hand tools and power tools.

Tasks: Follow established safety rules and regulations and maintain a safe and clean environment. Study specifications in blueprints, sketches, or building plans to prepare project layout and determine dimensions and materials required. Measure and mark cutting lines on materials, using a ruler, pencil, chalk, and marking gauge. Shape or cut materials to specified measurements, using hand tools, machines, or power saws. Install structures or fixtures, such as windows, frames, floorings, trim, or hardware, using carpenters' hand or power tools.

Skills:

WorkKeys Scores WorkKeys explanation on page ii

Applied Math	4	Workplace Docs	4	Graphic Literacy	4
Applied Technology	3	Workplace Observ.	3		

Personal Skills Required for this Career:

Active Listening, Monitoring, Speaking, Active Learning, Complex Problem Solving

Top Industries: [Construction](#) and [Self-Employed](#)

Education:

- These occupations usually require a high school diploma.
- Some previous work-related skill, knowledge, or experience is usually needed. For example, a teller would benefit from experience working directly with the public.
- Employees in these occupations need anywhere from a few months to one year of working with experienced employees. A recognized apprenticeship program may be associated with these occupations.

Educational Institutions:

- Area Career Centers
- Ivy Tech Community College

Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$13.87	\$22.40	\$39.78
	Yearly	\$28,860	\$46,590	\$82,750
Indiana	Hourly	\$14.13	\$22.49	\$32.73
	Yearly	\$29,400	\$46,790	\$68,070

Employment Trends: Appendix A

Website for further information: www.agc.org

Computer and Information Systems Manager



Description: Plan, direct, or coordinate activities in such fields as electronic data processing, information systems, systems analysis, and computer programming.

Tasks: Direct daily operations of department, analyzing workflow, establishing priorities, developing standards and setting deadlines. Meet with department heads, managers, supervisors, vendors, and others, to solicit cooperation and resolve problems. Review project plans to plan and coordinate project activity. Assign and review the work of systems analysts, programmers, and other computer-related workers. Provide users with technical support for computer problems. Develop computer information resources, providing for data security and control, strategic computing, and disaster recovery. Recruit, hire, train and supervise staff, or participate in staffing decisions. Stay abreast of advances in technology. Consult with users, management, vendors, and technicians to assess computing needs and system requirements. Develop and interpret organizational goals, policies, and procedures. Evaluate the organization's technology use and needs and recommend improvements, such as hardware and software upgrades. Review and approve all systems charts and programs prior to their implementation.

Skills:

WorkKeys Scores WorkKeys explanation on page ii

Applied Math	5	Workplace Docs	5	Graphic Literacy	5
Applied Technology		Workplace Observ.	4		

Personal Skills Required for this Career:

Critical Thinking, Active Listening, Reading Comprehension, Judgement and Decision Making, Monitoring,

Top Industries: [Professional, Scientific, and Technical Services](#) and [Finance and Insurance](#)

Education:

- Most require a four-year bachelor's degree, but some do not.
- A considerable amount of work-related skill, knowledge or experience is needed for these occupations.
- Employees in these occupations usually need several years of work-related experience, on-the-job training, and/or vocation training.

Educational Institutions:

- Ivy Tech Community College
- Indiana University Kokomo
- Indiana Wesleyan University
- Purdue University

Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$41.05	\$68.53	\$100.00+
	Yearly	\$85,380	\$142,530	\$208,000+
Indiana	Hourly	\$34.06	\$55.33	\$88.86
	Yearly	\$70,840	\$115,080	\$184,820

Employment Trends: Appendix A

Website for further information: <https://www.comptia.org/>

Computer Numerically Controlled Machine Tool Programmers



Description: Develop programs to control machining or processing of metal or plastic parts by automatic machine tools, equipment, or systems.

Tasks: Write programs in the language of a machine's controller and store programs on media such as punch tapes, magnetic tapes, or disks. Determine the sequence of machine operations, and select the proper cutting tools needed to machine workpieces into the desired shapes. Revise programs or tapes to eliminate errors, and retest programs to check that problems have been solved. Analyze job orders, drawings, blueprints, specifications, printed circuit board pattern films, and design data to calculate dimensions, tool selection, machine speeds, and feed rates. Write instruction sheets and cutter lists for a machine's controller to guide setup and encode numerical control tapes. Observe machines on trial runs or conduct computer simulations to ensure that programs and machinery will function properly and produce items that meet specifications. Enter computer commands to store or retrieve parts patterns, graphic displays, or programs that transfer data to other media. Modify existing programs to enhance efficiency.

Skills:

WorkKeys Scores WorkKeys explanation on page ii

Applied Math	4	Workplace Docs	4	Graphic Literacy	4
Applied Technology	4	Workplace Observ.	3		

Personal Skills Required for this Career:

Programming, Monitoring, Operation Monitoring, Active Learning, Complex Problem Solving

Top Industries: [Manufacturing](#)

Education:

- Most occupations require training in vocational school, related on-the-job experience, or an associate's degree
- Previous work-related skill, knowledge, or experience is required for these occupations
- Employees in these occupations usually need one or two years of training involving both on-the-job experience and informal training with experienced workers. A recognized apprenticeship program may be associated with these occupations.

Educational Institutions:

- Ivy Tech Community College

Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$16.29	\$25.57	\$40.06
	Yearly	\$33,870	\$53,190	\$83,330
Indiana	Hourly	\$15.96	\$23.33	\$31.98
	Yearly	\$31,190	\$48,530	\$66,520

Employment Trends: Appendix A

Website for further information: <http://www.pmpa.org/>

Computer Systems Analyst



Description: Analyze science, engineering, business, and all other data processing problems for application to electronic data processing systems. Analyze user requirements, procedures, and problems, and problems to automate or improve existing systems and review computer system capabilities, workflow, and scheduling limitations. May analyze or recommend commercially available software.

Tasks: Test, maintain, and monitor computer programs and systems, including coordinating the installation of computer programs and systems. Troubleshoot program and system malfunctions to restore normal functioning. Expand or modify system to serve new purposes or improve work flow. Use the computer in the analysis and solution of business problems, such as development of integrated production and inventory control and cost analysis systems. Consult with management to ensure agreement on system principles. Confer with clients regarding the nature of the information processing or computation needs a computer program is to address. Develop, document and revise system design procedures, test procedures, and quality standards. Train staff and users to work with computer systems and programs. Coordinate and link the computer systems within an organization to increase compatibility and so information can be shared. Assess the usefulness of pre-developed application packages and adapt them to a user environment.

Skills:

WorkKeys Scores WorkKeys explanation on page ii

Applied Math	5	Workplace Docs	4	Graphic Literacy	4
Applied Technology		Workplace Observ.	5		

Personal Skills Required for this Career:

Active Listening, Critical Thinking, Reading Comprehension, Speaking, Systems Analysis

Top Industries: [Professional, Scientific, and Technical Services](#) and [Finance and Insurance](#)

Education:

- Most of these occupations require a four-year bachelor's degree, but some do not
- A considerable amount of work-related skill, knowledge, or experience is needed for these occupations.
- Employees in these occupations usually need several years of work-related experience, on-the-job training, and/or vocational training.

Educational Institutions:

- Indiana University Kokomo
- Indiana Wesleyan University
- Purdue Polytechnic Institute
- Purdue University
- Ivy Tech Community College

Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$26.14	\$42.66	\$68.38
	Yearly	\$54,360	\$88,740	\$142,220
Indiana	Hourly	\$24.08	\$36.08	\$57.77
	Yearly	\$50,080	\$75,060	\$120,160

Employment Trends: Appendix A

Website for further information: <http://www.bls.gov/ooh/computer-and-information-technology/computer-systems-analysts.htm>

Computer User Support Specialist



Description: Provide technical assistance to computer users. Answer questions or resolve computer problems for clients in person, or via telephone or electronically. May provide assistance concerning the use of computer hardware and software, including printing, installation, word processing, electronic mail, and operating systems.

Tasks: Answer user inquiries regarding computer software or hardware operation to resolve problems. Oversee the daily performance of computer systems. Read technical manuals, confer with users, or conduct computer diagnostics to investigate and resolve problems or to provide technical assistance and support. Set up equipment for employee use, performing or ensuring proper installation of cables, operating systems, or appropriate software. Develop training materials and procedures, or train users in the proper use of hardware or software. Refer major hardware or software problems or defective products to vendors or technicians for service. Enter commands and observe system functioning to verify correct operations and detect errors. Maintain records of daily data communication transactions, problems and remedial actions taken, or installation activities. Install and perform minor repairs to hardware, software, or peripheral equipment, following design or installation specifications. Prepare evaluations of software or hardware, and recommend improvements or upgrades. Confer with staff, users, and management to establish requirements for new systems or modifications.

Skills:

WorkKeys Scores WorkKeys explanation on page ii

Applied Math	4	Workplace Docs	4	Graphic Literacy	4
Applied Technology		Workplace Observ.	4		

Personal Skills Required for this Career:

Active Listening, Reading Comprehension, Speaking, Complex Problem Solving, Critical Thinking

Top Industries: [Professional, Scientific, and Technical Services](#) and [Finance and Insurance](#)

Education:

- Most occupations in this zone require training in vocational schools, related on-the-job experience, or an associate's degree.
- Previous work-related skill, knowledge, or experience is required for these occupations.
- Employees in these occupations usually need one or two years of training involving both on-the-job experience and informal training with experienced workers. A recognized apprenticeship program may be associated with these occupations.

Educational Institutions:

- Indiana University Kokomo
- Purdue University
- Purdue Polytechnic Institute
- Ivy Tech Community College

Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$15.01	\$24.51	\$40.63
	Yearly	\$31,220	\$50,980	\$84,510
Indiana	Hourly	\$13.75	\$21.34	\$34.05
	Yearly	\$28,600	\$44,380	\$70,830

Employment Trends: Appendix A

Website for further information: <https://www.bls.gov/OOH/computer-and-information-technology/computer-support-specialists.htm>

Computer-Controlled Machine Tool Operator



Description: Operate computer-controlled machines or robots to perform one or more machine functions on metal or plastic work pieces.

Tasks: Measure dimensions of finished workpieces to ensure conformance to specifications, using precision measuring instruments, templates, and fixtures. Mount, install, align, and secure tools, attachments, fixtures, and workpieces on machines, using hand tools and precision measuring instruments. Stop machines to remove finished workpieces or to change tooling, setup, or workpiece placement, according to required machining sequences. Transfer commands from servers to computer numerical control (CNC) modules, using computer network links. Check to ensure that workpieces are properly lubricated and cooled during machine operation. Set up and operate computer-controlled machines or robots to perform one or more machine functions on metal or plastic workpieces. Insert control instructions into machine control units to start operation. Review program specifications or blueprints to determine and set machine operations and sequencing, finished workpiece dimensions, or numerical control sequences. Listen to machines during operation to detect sounds such as those made by dull cutting tools or excessive vibration, and adjust machines to compensate for problems. Remove and replace dull cutting tools. Monitor machine operation and control panel displays, and compare readings to specifications to detect malfunctions. Enter commands or load control media, such as tapes, cards, or disks, into machine controllers to retrieve programmed instructions.

Skills:

WorkKeys Scores WorkKeys explanation on page ii

Applied Math	4	Workplace Docs	4	Graphic Literacy	4
Applied Technology	4	Workplace Observ.	3		

Personal Skills Required for this Career:

Operation Monitoring, Monitoring, Critical Thinking, Quality Control Analysis, Operation and Control

Top Industries: [Manufacturing](#)

Education:

- Most occupations require training in vocational school, related on-the-job experience, or an associate's degree
- Previous work-related skill, knowledge, or experience is required for these occupations
- Employees in these occupations usually need one or two years of training involving both on-the-job experience and informal training with experienced workers.

Educational Institutions:

- Area Career Centers
- Ivy Tech Community College

Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$12.93	\$19.26	\$29.16
	Yearly	\$26,890	\$40,070	\$60,650
Indiana	Hourly	\$13.25	\$18.27	\$27.06
	Yearly	\$27,560	\$38,000	\$56,290

Employment Trends: Appendix A

Website for further information: <http://www.pmpa.org/>

Construction Manager



Description: Plan, direct or coordinate, usually through subordinate supervisory personnel, activities concerned with the construction and maintenance of structures, facilities, and systems. Participate in the conceptual development of a construction project and oversee its organization, scheduling, budgeting, and implementation.

Tasks: Confer with supervisory personnel, owners, contractors, or design professionals to discuss and resolve matters, such as work procedures, complaints, or construction problems. Plan, schedule, or coordinate construction project activities to meet deadlines. Prepare and submit budget estimates, progress reports, or cost tracking reports. Inspect or review projects to monitor compliance with building and safety codes, or other regulations. Plan, organize, or direct activities concerned with the construction or maintenance of structures, facilities, or systems. Study job specifications to determine appropriate construction methods. Prepare contracts or negotiate revisions to contractual agreements with architects, consultants, clients, suppliers, or subcontractors. Interpret and explain plans and contract terms to representatives of the owner or developer, including administrative staff, workers, or clients. Perform or contract others to perform prebuilding assessments, such as conceptual cost estimating, rough order of magnitude estimating, feasibility, or energy efficiency, environmental, and sustainability assessments. Apply for and obtain all necessary permits or licenses. Evaluate construction methods and determine cost-effectiveness of plans, using computer models. Contract or oversee craft work, such as painting or plumbing. Direct and supervise construction or related workers. Determine labor requirements for dispatching workers to construction sites. Requisition supplies or materials to complete construction projects.

Skills:

WorkKeys Scores WorkKeys explanation on page ii

Applied Math	5	Workplace Docs	6	Graphic Literacy	5
Applied Technology	5	Workplace Observ.	4		

Personal Skills Required for this Career:

Active Listening, Critical Thinking, Speaking, Complex Problem Solving, Coordination

Top Industries: [Self-Employed](#) and [Construction](#)

Education:

- Most of these occupations require a four-year bachelor's degree, but some do not.
- A considerable amount of work-related skill, knowledge, or experience is needed for these occupations
- Employees in these occupations usually need several years of work-related experience, on-the-job training, and/or vocational training.

Educational Institutions:

- Indiana University Kokomo
- Ivy Tech Community College
- Purdue University

Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$26.56	\$44.89	\$77.65
	Yearly	\$55,240	\$93,370	\$161,510
Indiana	Hourly	\$24.04	\$38.32	\$60.94
	Yearly	\$50,000	\$79,710	\$126,760

Employment Trends: Appendix A

Website for further information: <http://www.bls.gov/oco/ocos005.htm>

Customer Service Representative



Description: Interact with customers to provide information in response to inquiries about products and services and to handle and resolve complaints.

Tasks: Confer with customers by telephone or in person to provide information about products or services, take or enter orders, cancel accounts, or obtain details of complaints. Keep records of customer interactions or transactions, recording details of inquiries, complaints, or comments, as well as actions taken. Check to ensure that appropriate changes were made to resolve customers' problems. Resolve customers' service or billing complaints by performing activities such as exchanging merchandise, refunding money, or adjusting bills. Compare disputed merchandise with original requisitions and information from invoices and prepare invoices for returned goods. Obtain and examine all relevant information to assess validity of complaints and to determine possible causes, such as extreme weather conditions that could increase utility bills.

Skills:

WorkKeys Scores WorkKeys explanation on page ii

Applied Math	4	Workplace Docs	4	Graphic Literacy	4
Applied Technology		Workplace Observ.	2		

Personal Skills Required for this Career:

Active Listening, Speaking, Service Orientation, Reading Comprehension, Critical Thinking

Top Industries: [Finance and Insurance](#) and [Administrative and Support Services](#)

Education:

- These occupations usually require a high school diploma.
- Some previous work-related skill, knowledge, or experience is usually needed.
- Employees in these occupations need anywhere from a few months to one year of working with experienced employees. A recognized apprenticeship program may be associated with these occupations.

Educational Institutions:

- Ivy Tech Community College

Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$10.65	\$16.23	\$26.59
	Yearly	\$22,140	\$33,750	\$55,310
Indiana	Hourly	\$10.28	\$16.15	\$26.71
	Yearly	\$21,380	\$33,590	\$55,570

Employment Trends: Appendix A

Website for further information: <http://www.bls.gov/OOH/office-and-administrative-support/customer-service-representatives.htm>

Dental Hygienist

Description: Clean teeth and examine oral areas, head, and neck for signs of oral disease. May educate patients on oral hygiene, take and develop x-rays, or apply fluoride or sealants.

Tasks: Clean calcareous deposits, accretions, and stains from teeth and beneath margins of gums, using dental instruments. Record and review patient medical histories. Examine gums, using probes, to locate periodontal recessed gums and signs of gum disease. Feel and visually examine gums for sores and signs of disease. Expose and develop x-ray film. Chart conditions of decay and disease for diagnosis and treatment by dentist. Maintain dental equipment and sharpen and sterilize dental instruments. Feel lymph nodes under patient's chin to detect swelling or tenderness that could indicate presence of oral cancer. Provide clinical services or health education to improve and maintain the oral health of patients or the general public. Apply fluorides or other cavity preventing agents to arrest dental decay. Maintain patient recall system. Administer local anesthetic agents. Remove excess cement from coronal surfaces of teeth. Conduct dental health clinics for community groups to augment services of dentist.

Skills:

WorkKeys Scores WorkKeys explanation on page ii

Applied Math	3	Workplace Docs	4	Graphic Literacy	4
Applied Technology		Workplace Observ.	3		

Personal Skills Required for this Career:

Speaking, Active Listening, Critical Thinking, Judgement and Decision Making, Monitoring

Top Industries: [Health Care and Social Assistance](#)

Education:

- Most occupations in this zone require training in vocational schools, related on-the-job experience, or an associate's degree.
- Previous work-related skill, knowledge, or experience is required for these occupations.
- Employees in these occupations usually need one or two years of training involving both on-the-job experience and informal training with experienced workers. A recognized apprenticeship program may be associated with these occupations.

Educational Institutions:

- Ivy Tech Community College

Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$24.97	\$35.97	\$48.95
	Yearly	\$51,930	\$74,820	\$101,820
Indiana	Hourly	\$22.08	\$33.51	\$42.38
	Yearly	\$45,940	\$69,700	\$88,140

Employment Trends: Appendix A

Website for further information: www.adha.org

Education Administrator, Elementary and Secondary

Description: Plan, direct, or coordinate the academic, administrative, or auxiliary activities of public or private elementary or secondary level schools.

Tasks: Evaluate curricula, teaching methods, and programs to determine their effectiveness, efficiency, and use, and to ensure that school activities comply with federal, state, and local regulations. Observe teaching methods and examine learning materials to evaluate and standardize curricula and teaching techniques, and to determine areas where improvement is needed. Counsel and provide guidance to students regarding personal, academic, vocational, or behavioral issues. Collaborate with teachers to develop and maintain curriculum standards, develop mission statements, and set performance goals and objectives. Direct and coordinate activities of teachers, administrators, and support staff at schools, public agencies, and institutions.

Skills:

WorkKeys Scores WorkKeys explanation on page ii

Applied Math	5	Workplace Docs	5	Graphic Literacy	5
Applied Technology		Workplace Observ.	4		

Personal Skills Required for this Career:

Active Listening, Speaking, Critical Thinking, Learning Strategies, Reading Comprehension

Top Industries: [Educational Services](#)

Education:

- Most of these occupations require graduate school. For example, they may require a master's degree, and some require a Ph.D., M.D., or J.D. (law degree).
- Extensive skill, knowledge, and experience are needed for these occupations. Many require more than five years of experience.

Employees may need some on-the-job training, but most of these occupations assume that the person will already have the required skills, knowledge, work-related experience, and/or training.

Educational Institutions:

- Indiana University Kokomo
- Purdue University

Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	No Data Available	No Data Available	No Data Available
	Yearly	\$61,490	\$95,310	\$144,950
Indiana	Hourly	No Data Available	No Data Available	No Data Available
	Yearly	\$61,180	\$86,480	\$119,020

Employment Trends: Appendix A

Website for further information: <http://www.bls.gov/OOH/management/elementary-middle-and-high-school-principals.htm>

Description: Plan, direct, or coordinate research, instructional, student administration and services, and other educational activities at postsecondary institutions, including universities, colleges, and junior and community colleges.

Tasks: Design or use assessments to monitor student learning outcomes. Recruit, hire, train, and terminate departmental personnel. Direct, coordinate, and evaluate the activities of personnel, including support staff engaged in administering academic institutions, departments, or alumni organizations. Advise students on issues such as course selection, progress toward graduation, and career decisions. Plan, administer, and control budgets, maintain financial records, and produce financial reports.

Skills:

WorkKeys Scores WorkKeys explanation on page ii

Applied Math	5	Workplace Docs	5	Graphic Literacy	5
Applied Technology		Workplace Observ.	3		

Personal Skills Required for this Career:

Critical Thinking, Reading Comprehension, Active Listening, Instruction, Monitoring

Top Industries: [Educational Services](#)

Education:

- Most of these occupations require graduate school. For example, they may require a master's degree, and some require a Ph.D., M.D., or J.D. (law degree).
- Extensive skill, knowledge, and experience are needed for these occupations. Many require more than five years of experience.
- Employees may need some on-the-job training, but most of these occupations assume that the person will already have the required skills, knowledge, work-related experience, and/or training.

Educational Institutions:

- Indiana University Kokomo
- Purdue University

Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$26.29	\$45.36	\$91.63
	Yearly	\$54,680	\$94,340	\$190,600
Indiana	Hourly	\$24.14	\$41.92	\$81.84
	Yearly	\$50,210	\$87,190	\$170,220

Employment Trends: Appendix A

Website for further information: <http://www.bls.gov/OOH/management/postsecondary-education-administrators.htm>

Electrical Engineers



Description: Research, design, develop, test, or supervise the manufacturing and installation of electrical equipment, components, or systems for commercial, industrial, military, or scientific use.

Tasks: Operate computer-assisted engineering or design software or equipment to perform engineering tasks. Prepare technical drawings, specifications of electrical systems, or topographical maps to ensure that installation and operations conform to standards and customer requirements. Confer with engineers, customers, or others to discuss existing or potential engineering projects or products. Design, implement, maintain, or improve electrical instruments, equipment, facilities, components, products, or systems for commercial, industrial, or domestic purposes. Direct or coordinate manufacturing, construction, installation, maintenance, support, documentation, or testing activities to ensure compliance with specifications, codes, or customer requirements.

Skills:

WorkKeys Scores WorkKeys explanation on page ii

Applied Math	7	Workplace Docs	6	Graphic Literacy	6
Applied Technology	6	Workplace Observ.	4		

Personal Skills Required for this Career:

Active Listening, Complex Problem Solving, Critical Thinking, Reading Comprehension, Writing

Top Industries: [Manufacturing](#)

Education:

- Most of these occupations require a four-year bachelor's degree, but some do not.
- A considerable amount of work-related skill, knowledge, or experience is needed for these occupations.
- Employees in these occupations usually need several years of work-related experience, on-the-job training, and/or vocational training.

Educational Institutions:

- Indiana University Kokomo
- Purdue University

Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$29.42	\$46.46	\$73.67
	Yearly	\$61,190	\$96,640	\$153,240
Indiana	Hourly	\$27.21	\$39.06	\$60.07
	Yearly	\$56,590	\$81,250	\$124,940

Employment Trends: Appendix A

Website for further information: <https://www.nspe.org/>

Electrician



Description: Install, maintain, and repair electrical wiring, equipment, and fixtures. Ensure that work is in accordance with relevant codes. May install or service street lights, intercom systems, or electrical control systems.

Tasks: Plan layout and installation of electrical wiring, equipment, or fixtures, based on job specifications and local codes. Connect wires to circuit breakers, transformers, or other components. Test electrical systems or continuity of circuits in electrical wiring, equipment, or fixtures, using testing devices, such as ohmmeters, voltmeters, or oscilloscopes, to ensure compatibility and safety of system. Use a variety of tools or equipment, such as power construction equipment, measuring devices, power tools, and testing equipment, such as oscilloscopes, ammeters, or test lamps. Inspect electrical systems, equipment, or components to identify hazards, defects, or the need for adjustment or repair, and to ensure compliance with codes.

Skills:

WorkKeys Scores WorkKeys explanation on page ii

Applied Math	4	Workplace Docs	5	Graphic Literacy	5
Applied Technology	4	Workplace Observ.	3		

Personal Skills Required for this Career:

Troubleshooting, Repairing, Active Listening, Critical Thinking, Judgement and Decision Making. Installation, Active Learning

Top Industries: [Construction](#)

Education:

- Most occupations in this zone require training in vocational schools, related on-the-job experience, or an associate's degree.
- Previous work-related skill, knowledge, or experience is required for these occupations.
- Employees in these occupations usually need one or two years of training involving both on-the-job experience and informal training with experienced workers. A recognized apprenticeship program may be associated with these occupations.

Educational Institutions:

- Ivy Tech Community College

Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$15.84	\$26.53	\$45.49
	Yearly	\$32,940	\$55,190	\$94,620
Indiana	Hourly	\$16.41	\$27.40	\$41.15
	Yearly	\$34,140	\$56,990	\$85,600

Employment Trends: Appendix A

Website for further information: www.necanet.org

Emergency Medical Technicians and Paramedics



Description: Assess injuries, administer emergency medical care, and extricate trapped individuals. Transport injured or sick persons to medical facilities.

Tasks: Administer first aid treatment or life support care to sick or injured persons in prehospital settings. Operate equipment, such as electrocardiograms (EKGs), external defibrillators, or bag valve mask resuscitators, in advanced life support environments. Perform emergency diagnostic and treatment procedures, such as stomach suction, airway management, or heart monitoring, during ambulance ride. Observe, record, and report to physician the patient's condition or injury, the treatment provided, and reactions to drugs or treatment. Assess nature and extent of illness or injury to establish and prioritize medical procedures. Drive mobile intensive care unit to specified location, following instructions from emergency medical dispatcher. Decontaminate ambulance interior following treatment of patient with infectious disease and report case to proper authorities. Administer drugs, orally or by injection, or perform intravenous procedures under a physician's direction. Immobilize patient for placement on stretcher and ambulance transport, using backboard or other spinal immobilization device.

Skills:

WorkKeys Scores WorkKeys explanation on page ii

Applied Math	3	Workplace Docs	5	Graphic Literacy	4
Applied Technology	3	Workplace Observ.	3		

Personal Skills Required for this Career:

Critical Thinking, Active Listening, Coordination, Speaking, Service Orientation, Social Perceptiveness

Top Industries: [Health Care and Social Assistance](#) and [Government](#)

Education:

- Most occupations in this zone require training in vocational schools, related on-the-job experience, or an associate's degree.
- Most occupations in this zone require training in vocational schools, related on-the-job experience, or an associate's degree.
- Employees in these occupations usually need one or two years of training involving both on-the-job experience and informal training with experienced workers. A recognized apprenticeship program may be associated with these occupations.

Educational Institutions:

- Purdue University
- Ivy Tech Community College

Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$10.94	\$16.50	\$28.19
	Yearly	\$22,760	\$34,320	\$58,640
Indiana	Hourly	\$10.68	\$15.37	\$23.54
	Yearly	\$22,220	\$31,980	\$48,970

Employment Trends: Appendix A

Website for further information: <https://www.naemt.org/>

Financial Manager

Description: Direct and coordinate financial activities of workers in a branch, office, or department of an establishment, such as branch bank, brokerage firm, risk and insurance department, or credit department.

Tasks: Plan, direct, or coordinate the activities of workers in branches, offices, or departments of establishments, such as branch banks, brokerage firms, risk and insurance departments, or credit departments. Establish and maintain relationships with individual or business customers or provide assistance with problems these customers may encounter. Prepare operational or risk reports for management analysis. Evaluate data pertaining to costs to plan budgets. See more occupations related to this task. Examine, evaluate, or process loan applications. Approve, reject, or coordinate the approval or rejection of lines of credit or commercial, real estate, or personal loans. Oversee the flow of cash or financial instruments. Prepare financial or regulatory reports required by laws, regulations, or boards of directors. Develop or analyze information to assess the current or future financial status of firms. Communicate with stockholders or other investors to provide information or to raise capital. Evaluate financial reporting systems, accounting or collection procedures, or investment activities and make recommendations for changes to procedures, operating systems, budgets, or other financial control functions. Analyze and classify risks and investments to determine their potential impacts on companies. Establish procedures for custody or control of assets, records, loan collateral, or securities to ensure safekeeping. See more occupations related to this task.

Skills:

WorkKeys Scores WorkKeys explanation on page ii

Applied Math	5	Workplace Docs	5	Graphic Literacy	5
Applied Technology		Workplace Observ.	3		

Personal Skills Required for this Career:

Active Listening, Critical Thinking, Monitoring, Reading Comprehension, Speaking

Top Industries: [Finance and Insurance](#) and [Management of Companies and Enterprises](#)

Education:

- Most of these occupations require a four-year bachelor's degree, but some do not.
- A considerable amount of work-related skill, knowledge, or experience is needed for these occupations.
- Employees in these occupations usually need several years of work-related experience, on-the-job training, and/or vocational training.

Educational Institutions:

- Indiana University Kokomo
- Purdue University

Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$32.51	\$61.53	\$100.00+
	Yearly	\$67,620	\$127,990	\$208,000+
Indiana	Hourly	\$26.57	\$50.11	\$98.13
	Yearly	\$55,260	\$104,220	\$204,110

Employment Trends: Appendix A

Website for further information: <http://www.bls.gov/ooh/management/financial-managers.htm>

First-line Supervisor/Manager of Mechanics, Installers, and Repairers

Description: Directly supervise and coordinate the activities of mechanics, installers, and repairers.

Tasks: Determine schedules, sequences, and assignments for work activities, based on work priority, quantity of equipment and skill of personnel. Monitor employees' work levels and review work performance. Monitor tool and part inventories and the condition and maintenance of shops to ensure adequate working conditions. Investigate accidents and injuries, and prepare reports of findings. Recommend or initiate personnel actions, such as hires, promotions, transfers, discharges, and disciplinary measures. Compile operational and personnel records, such as time and production records, inventory data, repair and maintenance statistics, and test results. Develop, implement, and evaluate maintenance policies and procedures. Counsel employees about work-related issues and assist employees to correct job-skill deficiencies. Examine objects, systems, or facilities, and analyze information to determine needed installations, services, or repairs. Conduct or arrange for worker training in safety, repair, and maintenance techniques, operational procedures, or equipment use.

Skills:

WorkKeys Scores WorkKeys explanation on page ii

Applied Math	4	Workplace Docs	5	Graphic Literacy	5
Applied Technology	4	Workplace Observ.	4		

Personal Skills Required for this Career:

Management of Personnel Resources, Monitoring, Critical Thinking, Coordination, Speaking

Top Industries: [Retail Trade](#) and [Manufacturing](#)

Education:

- Most occupations in this zone require training in vocational schools, related on-the-job experience, or an associate's degree.
- Previous work-related skill, knowledge, or experience is required for these occupations.
- Employees in these occupations usually need one or two years of training involving both on-the-job experience and informal training with experienced workers. A recognized apprenticeship program may be associated with these occupations.

Educational Institutions:

- Indiana University Kokomo
- Ivy Tech Community College
- Purdue University

Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$19.19	\$31.80	\$50.01
	Yearly	\$39,910	\$66,140	\$104,000
Indiana	Hourly	\$18.72	\$29.11	\$46.48
	Yearly	\$38,940	\$60,550	\$96,680

Employment Trends: Appendix A

Website for further information: <http://www.bls.gov/oes/current/oes491011.htm>

First-line Supervisor/Manager of Office & Administrative Support Workers

Description: Directly supervise and coordinate the activities of clerical and administrative support workers.

Tasks: Supervise the work of office, administrative, or customer service employees to ensure adherence to quality standards, deadlines, and proper procedures, correcting errors or problems. Resolve customer complaints or answer customers' questions regarding policies and procedures. Provide employees with guidance in handling difficult or complex problems or in resolving escalated complaints or disputes. Review records or reports pertaining to activities such as production, payroll, or shipping to verify details, monitor work activities, or evaluate performance. Discuss job performance problems with employees to identify causes and issues and to work on resolving problems. Prepare and issue work schedules, deadlines, and duty assignments for office or administrative staff. Recruit, interview, and select employees. Interpret and communicate work procedures and company policies to staff. Evaluate employees' job performance and conformance to regulations and recommend appropriate personnel action. Train or instruct employees in job duties or company policies or arrange for training to be provided. Implement corporate or departmental policies, procedures, and service standards in conjunction with management. Coordinate activities with other supervisory personnel or with other work units or departments.

Skills:

WorkKeys Scores WorkKeys explanation on page ii

Applied Math	4	Workplace Docs	4	Graphic Literacy	4
Applied Technology		Workplace Observ.	3		

Personal Skills Required for this Career:

Active Listening, Coordination, Monitoring, Reading Comprehension, Social Perceptiveness

Top Industries: [Finance and Insurance](#) and [Health Care and Social Assistance](#)

Education:

- Most occupations in this zone require training in vocational schools, related on-the-job experience, or an associate's degree.
- Previous work-related skill, knowledge, or experience is required for these occupations.
- Employees in these occupations usually need one or two years of training involving both on-the-job experience and informal training with experienced workers. A recognized apprenticeship program may be associated with these occupations.

Educational Institutions:

- Indiana University Kokomo
- Ivy Tech Community College
- Purdue University

Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$16.27	\$26.83	\$43.43
	Yearly	\$33,850	\$55,810	\$90,320
Indiana	Hourly	\$15.64	\$24.56	\$39.29
	Yearly	\$32,530	\$51,090	\$81,720

Employment Trends: Appendix A

Website for further information: <http://www.bls.gov/oes/current/oes431011.htm>

First-line Supervisor/Manager of Production & Operating Workers



Description: Directly supervise and coordinate the activities of production and operating workers, such as inspectors, precision workers, machine setters and operators, assemblers, fabricators, and plant and system operators.

Tasks: Enforce safety and sanitation regulations. Direct and coordinate the activities of employees engaged in the production or processing of goods, such as inspectors, machine setters, and fabricators. Confer with other supervisors to coordinate operations and activities within or between departments. Plan and establish work schedules, assignments, and production sequences to meet production goals. Inspect materials, products, or equipment to detect defects or malfunctions. Conduct employee training in equipment operations or work and safety procedures, or assign employee training to experienced workers. Interpret specifications, blueprints, job orders, and company policies and procedures for workers. Keep records of employees' attendance and hours worked. Read and analyze charts, work orders, production schedules, and other records and reports to determine production requirements and to evaluate current production estimates and outputs. Maintain operations data, such as time, production, and cost records, and prepare management reports of production results. Determine standards, budgets, production goals, and rates, based on company policies, equipment and labor availability, and workloads.

Skills:

WorkKeys Scores WorkKeys explanation on page ii

Applied Math	4	Workplace Docs	4	Graphic Literacy	4
Applied Technology	4	Workplace Observ.	3		

Personal Skills Required for this Career:

Active Listening, Speaking, Coordination, Critical Thinking, Management of Personnel Resources

Top Industries: [Manufacturing](#)

Education:

- These occupations usually require a high school diploma.
- Some previous work-related skill, knowledge, or experience is usually needed.
- Employees in these occupations need anywhere from a few months to one year of working with experienced employees. A recognized apprenticeship program may be associated with these occupations.

Educational Institutions:

- Indiana University Kokomo
- Ivy Tech Community College
- Purdue University

Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$17.32	\$29.05	\$47.84
	Yearly	\$36,020	\$60,420	\$99,500
Indiana	Hourly	\$17.20	\$27.91	\$42.89
	Yearly	\$35,770	\$58,060	\$89,200

Employment Trends: Appendix A

Website for further information: <http://www.bls.gov/oes/current/oes511011.htm>

First-line Supervisor/Manager of Transportation and Material Moving Workers

Description: Directly supervise and coordinate activities of transportation and material-moving machine and vehicle operators and helpers.

Tasks: Enforce safety rules and regulations. Plan work assignments and equipment allocations to meet transportation, operations or production goals. Direct workers in transportation or related services, such as pumping, moving, storing, or loading or unloading of materials or people. Review orders, production schedules, blueprints, or shipping or receiving notices to determine work sequences and material shipping dates, types, volumes, or destinations. Inspect or test materials, stock, vehicles, equipment, or facilities to ensure that they are safe, free of defects, and consistent with specifications. Confer with customers, supervisors, contractors, or other personnel to exchange information or to resolve problems. Monitor field work to ensure proper performance and use of materials. Plan and establish transportation routes. Maintain or verify records of time, materials, expenditures, or crew activities. Interpret transportation or tariff regulations, shipping orders, safety regulations, or company policies and procedures for workers. Prepare, compile, and submit reports on work activities, operations, production, or work-related accidents.

Skills:

WorkKeys Score

WorkKeys explanation on page ii

Applied Math	4	Workplace Docs	4	Graphic Literacy	4
Applied Technology		Workplace Observ.	3		

Personal Skills Required for this Career:

Active Listening Coordination, Management of Personnel Resources, Time Management, Critical Thinking

Top Industries: [Transportation and Warehousing](#) and [Wholesale Trade](#)

Education:

- These occupations usually require a high school diploma.
- Some previous work-related skill, knowledge, or experience is usually needed.
- Employees in these occupations need anywhere from a few months to one year of working with experienced employees. A recognized apprenticeship program may be associated with these occupations.

Educational Institutions:

- Ivy Tech Community College

Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$16.00	\$26.73	\$42.19
	Yearly	\$33,280	\$55,600	\$87,750
Indiana	Hourly	\$16.14	\$26.59	\$39.12
	Yearly	\$33,580	\$55,310	\$81,370

Employment Trends: Appendix A

Website for further information: <http://www.bls.gov/oes/current/oes531031.htm>

Description: Plan, direct, or coordinate the operations of public or private sector organizations. Duties and responsibilities include formulating policies, managing daily operations, and planning the use of materials and human resources, but are too diverse and general in nature to be classified in any one functional area of management or administration, such as personnel, purchasing, or administrative services.

Tasks: Review financial statements, sales or activity reports, or other performance data to measure productivity or goal achievement or to identify areas needing cost reduction or program improvement. Direct and coordinate activities of businesses or departments concerned with the production, pricing, sales, or distribution of products. Direct administrative activities directly related to making products or providing services. Prepare staff work schedules and assign specific duties. Monitor suppliers to ensure that they efficiently and effectively provide needed goods or services within budgetary limits. Establish or implement departmental policies, goals, objectives, or procedures in conjunction with board members, organization officials, or staff members. Manage the movement of goods into and out of production facilities to ensure efficiency, effectiveness, or sustainability of operations. Develop or implement product-marketing strategies, including advertising campaigns or sales promotions.

Skills:

WorkKeys Scores WorkKeys explanation on page ii

Applied Math	5	Workplace Docs	5	Graphic Literacy	5
Applied Technology	4	Workplace Observ.	3		

Personal Skills Required for this Career:

Active Listening, Coordination, Monitoring, Social Perceptiveness, Speaking

Top Industries: [Retail Trade](#) and [Manufacturing](#)

Education:

- Most of these occupations require a four-year bachelor's degree, but some do not.
- A considerable amount of work-related skill, knowledge, or experience is needed for these occupations.
- Employees in these occupations usually need several years of work-related experience, on-the-job training, and/or vocational training.

Educational Institutions:

- Purdue University
- Indiana University Kokomo
- Ivy Tech Community College

Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$21.50	\$48.52	\$100.00+
	Yearly	\$44,710	\$100,930	\$208,000+
Indiana	Hourly	\$18.39	\$39.53	\$94.55
	Yearly	\$38,250	\$82,230	\$196,670

Employment Trends: Appendix A

Website for further information: <http://www.amanet.org/>

Industrial Engineers



Description: Design, develop, test, and evaluate integrated systems for managing industrial production processes, including human work factors, quality control, inventory control, logistics and material flow, cost analysis, and production coordination.

Tasks: Plan and establish sequence of operations to fabricate and assemble parts or products and to promote efficient utilization. Review production schedules, engineering specification, orders, and related information to obtain knowledge of manufacturing methods, procedures, and activities. Estimate production costs, cost saving methods and the effects of product design changes on expenditures for management review, action and control. Draft and design layout of equipment, materials, and workspace to illustrate maximum efficiency using drafting tools and computer. Coordinate and implement quality control objectives, activities, or procedures to resolve production problems, maximize product reliability, or minimize costs. Communicate with management and user personnel to develop production and design standards. Develop manufacturing methods, labor utilization standards, and cost analysis systems to promote efficient staff and facility utilization. Complete production reports, purchase orders, and material, tool, and equipment lists. Record or oversee recording of information to ensure currency of engineering drawings and documentation of production problems. Evaluate precision and accuracy of production and testing equipment and engineering drawings to formulate corrective action plan.

Skills:

WorkKeys Scores	WorkKeys explanation on page ii				
Applied Math	5	Workplace Docs	6	Graphic Literacy	6
Applied Technology	6	Workplace Observ.	4		

Personal Skills Required for this Career:

Reading Comprehension, Active Listening, Complex Problem Solving, Critical Thinking, Writing

Top Industries: [Manufacturing](#) and [Professional, Scientific, and Technical Services](#)

Education:

- Most of these occupations require a four-year bachelor's degree, but some do not.
- A considerable amount of work-related skill, knowledge, or experience is needed for these occupations.
- Employees in these occupations usually need several years of work-related experience, on-the-job training, and/or vocational training.

Educational Institutions:

- Purdue University

Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$27.15	\$41.84	\$63.63
	Yearly	\$56,470	\$87,040	\$132,340
Indiana	Hourly	\$22.95	\$34.37	\$50.07
	Yearly	\$47,740	\$71,490	\$104,140

Employment Trends: Appendix A

Website for further information: <http://www.iienet2.org/Default.aspx>

Industrial Machinery Mechanic



Description: Repair, install, adjust, or maintain industrial production and processing machinery or refinery and pipeline distribution systems.

Tasks: Repair or maintain the operating condition of industrial production or processing machinery or equipment. Repair or replace broken or malfunctioning components of machinery or equipment. Disassemble machinery or equipment to remove parts and make repairs. Observe and test the operation of machinery or equipment to diagnose malfunctions, using voltmeters or other testing devices. Reassemble equipment after completion of inspections, testing, or repairs. Clean, lubricate, or adjust parts, equipment, or machinery. Examine parts for defects, such as breakage or excessive wear. Operate newly repaired machinery or equipment to verify the adequacy of repairs. Analyze test results, machine error messages, or information obtained from operators to diagnose equipment problems. Record parts or materials used and order or requisition new parts or materials as necessary. Record repairs and maintenance performed. Study blueprints or manufacturers' manuals to determine correct installation or operation of machinery. Cut and weld metal to repair broken metal parts, fabricate new parts, or assemble new equipment. Enter codes and instructions to program computer-controlled machinery.

Skills:

WorkKeys Scores WorkKeys explanation on page ii

Applied Math	4	Workplace Docs	4	Graphic Literacy	4
Applied Technology	4	Workplace Observ.	3		

Personal Skills Required for this Career:

Equipment Maintenance, Repairing, Operation Monitoring, Troubleshooting, Operation and Control

Top Industries: [Manufacturing](#) and [Other Services \(Except Public Administration\)](#)

Education:

- Most occupations in this zone require training in vocational schools, related on-the-job experience, or an associate's degree.
- Previous work-related skill, knowledge, or experience is required for these occupations.
- Employees in these occupations usually need one or two years of training involving both on-the-job experience and informal training with experienced workers. A recognized apprenticeship program may be associated with these occupations.

Educational Institutions:

- Area Career Centers
- Ivy Tech Community College

Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$16.19	\$25.16	\$37.59
	Yearly	\$33,670	\$52,340	\$78,190
Indiana	Hourly	\$16.45	\$24.25	\$34.70
	Yearly	\$34,210	\$50,440	\$72,180

Employment Trends: Appendix A

Website for further information: www.ntma.org

Industrial Production Manager



Description: Plan, direct, or coordinate the work activities and resources necessary for manufacturing products in accordance with cost, quality, and quantity specifications.

Tasks: Review processing schedules or production orders to make decisions concerning inventory requirements, staffing requirements, work procedures, or duty assignments, considering budgetary limitations and time constraints. Direct or coordinate production, processing, distribution, or marketing activities of industrial organizations. Develop or implement production tracking or quality control systems, analyzing production, quality control, maintenance, or other operational reports, to detect production problems. Hire, train, evaluate, or discharge staff or resolve personnel grievances. Review operations and confer with technical or administrative staff to resolve production or processing problems. Hire, train, evaluate, or discharge staff or resolve personnel grievances. Develop budgets or approve expenditures for supplies, materials, or human resources, ensuring that materials, labor, or equipment are used efficiently to meet production targets. Initiate or coordinate inventory or cost control programs. Coordinate or recommend procedures for facility or equipment maintenance or modification, including the replacement of machines. Maintain current knowledge of the quality control field, relying on current literature pertaining to materials use, technological advances, or statistical studies. Negotiate materials prices with suppliers.

Skills:

WorkKeys Scores WorkKeys explanation on page ii

Applied Math	4	Workplace Docs	4	Graphic Literacy	4
Applied Technology	4	Workplace Observ.	3		

Personal Skills Required for this Career:

Critical Thinking, Monitoring, Speaking, Coordination, Time Management

Top Industries: [Manufacturing](#)

Education:

- Most of these occupations require a four-year bachelor's degree, but some do not.
- A considerable amount of work-related skill, knowledge, or experience is needed for these occupations.
- Employees in these occupations usually need several years of work-related experience, on-the-job training, and/or vocational training.

Educational Institutions:

- Indiana University Kokomo
- Ivy Tech Community College
- Purdue University

Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$30.51	\$49.70	\$82.76
	Yearly	\$63,470	\$103,380	\$172,150
Indiana	Hourly	\$28.31	\$44.12	\$72.16
	Yearly	\$58,890	\$71,760	\$150,100

Employment Trends: Appendix A

Website for further information: <http://www.bls.gov/OOH/management/industrial-production-managers.htm>

Industrial Truck and Tractor Operator



Description: Operate industrial trucks or tractors equipped to move materials around a warehouse, storage yard, factory, construction site, or similar location.

Tasks: Move levers or controls that operate lifting devices, such as forklifts, lift beams with swivel-hooks, hoists, or elevating platforms, to load, unload, transport, or stack material. Inspect product load for accuracy and safely move it around the warehouse or facility to ensure timely and complete delivery. Manually or mechanically load or unload materials from pallets, skids, platforms, cars, lifting devices, or other transport vehicles. Position lifting devices under, over, or around loaded pallets, skids, or boxes and secure material or products for transport to designated areas. Weigh materials or products and record weight or other production data on tags or labels. Perform routine maintenance on vehicles or auxiliary equipment, such as cleaning, lubricating, recharging batteries, fueling, or replacing liquefied-gas tank. Move controls to drive gasoline- or electric-powered trucks, cars, or tractors and transport materials between loading, processing, and storage areas. Operate or tend automatic stacking, loading, packaging, or cutting machines. Signal workers to discharge, dump, or level materials.

Skills:

WorkKeys Scores WorkKeys explanation on page ii

Applied Math	3	Workplace Docs	3	Graphic Literacy	3
Applied Technology	3	Workplace Observ.	2		

Personal Skills Required for this Career:

Operation and Control, Operation Monitoring, Coordination, Equipment Maintenance, Time Management

Top Industries: [Manufacturing](#) and [Transportation and Warehousing](#)

Education:

- These occupations usually require a high school diploma.
- Some previous work-related skill, knowledge, or experience is usually needed.
- Employees in these occupations need anywhere from a few months to one year of working with experienced employees. A recognized apprenticeship program may be associated with these occupations.

Educational Institutions:

- Area Career Centers

Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$11.98	\$16.71	\$24.82
	Yearly	\$24,910	\$34,750	\$51,620
Indiana	Hourly	\$12.32	\$16.39	\$23.39
	Yearly	\$25,620	\$34,090	\$48,660

Employment Trends: Appendix A

Website for further information: <http://www.indtrk.org/>

Inspectors, Testers, Sorters, Samplers, and Weighers



Description: Inspect, test, sort, sample, or weigh nonagricultural raw materials or processed, machined, fabricated, or assembled parts or products for defects, wear, and deviations from specifications. May use precision measuring instruments and complex test equipment.

Tasks: Inspect, test, or measure materials, products, installations, or work for conformance to specifications. Measure dimensions of products to verify conformance to specifications, using measuring instruments such as rulers, calipers, gauges, or micrometers. Read blueprints, data, manuals, or other materials to determine specifications, inspection and testing procedures, adjustment methods, certification processes, formulas, or measuring instruments required. Record inspection or test data, such as weights, temperatures, grades, or moisture content, and quantities inspected or graded. Mark items with details such as grade or acceptance-rejection status. Collect or select samples for testing or for use as models. Write test or inspection reports describing results, recommendations, or needed repairs. Recommend necessary corrective actions, based on inspection results. Analyze test data, making computations as necessary, to determine test results. Make minor adjustments to equipment, such as turning setscrews to calibrate instruments to required tolerances. Compute defect percentages or averages, using formulas and calculators.

Skills:

WorkKeys Scores WorkKeys explanation on page ii

Applied Math	3	Workplace Docs	4	Graphic Literacy	4
Applied Technology	3	Workplace Observ.	2		

Personal Skills Required for this Career:

Quality Control Analysis, Active Listening, Critical Thinking, Monitoring, Reading Comprehension

Top Industries: [Manufacturing](#)

Education:

- These occupations usually require a high school diploma.
- Some previous work-related skill, knowledge, or experience is usually needed.
- Employees in these occupations need anywhere from a few months to one year of working with experienced employees. A recognized apprenticeship program may be associated with these occupations.

Educational Institutions:

- Area Career Centers

Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$11.32	\$18.39	\$31.49
	Yearly	\$23,550	\$38,250	\$65,510
Indiana	Hourly	\$11.38	\$17.85	\$28.99
	Yearly	\$23,670	\$37,130	\$60,290

Employment Trends: Appendix A

Website for further information: <http://asaq.org/index.aspx>

Laborers and Freight Stock, Material Mover



Bright Outlook

Description: Manually move freight, stock, or other materials or perform other general labor. Includes all manual laborers not elsewhere classified.

Tasks: Move freight, stock, or other materials to and from storage or production areas, loading docks, delivery vehicles, ships, or containers, by hand or using trucks, tractors, or other equipment. Sort cargo before loading and unloading. Attach identifying tags to containers or mark them with identifying information. Read work orders or receive oral instructions to determine work assignments or material or equipment needs. Stack cargo in locations such as transit sheds or in holds of ships as directed, using pallets or cargo boards. Record numbers of units handled or moved, using daily production sheets or work tickets. Install protective devices, such as bracing, padding, or strapping, to prevent shifting or damage to items being transported. Maintain equipment storage areas to ensure that inventory is protected. Pack containers and re-pack damaged containers. Connect electrical equipment to power sources so that it can be tested before use.

Skills:

WorkKeys Scores WorkKeys explanation on page ii

Applied Math	3	Workplace Docs	3	Graphic Literacy	4
Applied Technology	3	Workplace Observ.	2		

Personal Skills Required for this Career:

No skills met the minimum score.

Top Industries: [Transportation and Warehousing](#) and [Administrative and Support Services](#)

Education:

- These occupations usually require a high school diploma.
- Some previous work-related skill, knowledge, or experience is usually needed.
- Employees in these occupations need anywhere from a few months to one year of working with experienced employees.

Educational Institutions:

- Area Career Centers

Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$9.95	\$13.59	\$21.97
	Yearly	\$20,700	\$28,260	\$45,700
Indiana	Hourly	\$10.01	\$13.91	\$20.81
	Yearly	\$20,820	\$28,930	\$43,280

Employment Trends: Appendix A

Website for further information: <http://www.indtrk.org/>

Licensed Practical Nurse (LPN)

Description: Care for ill, injured, convalescent, or disabled persons in hospitals, nursing homes, clinics, private homes, group homes, and similar institutions. May work under the supervision of a registered nurse. Licensing required.

Tasks: Administer prescribed medications or start intravenous fluids, and note times and amounts on patients' charts. Observe patients, charting and reporting changes in patients' conditions, such as adverse reactions to medication or treatment, and taking any necessary action. Provide basic patient care and treatments, such as taking temperatures or blood pressures, dressing wounds, treating bedsores, giving enemas or douches, rubbing with alcohol, massaging, or performing catheterizations. Sterilize equipment and supplies, using germicides, sterilizer, or autoclave. Answer patients' calls and determine how to assist them. Measure and record patients' vital signs, such as height, weight, temperature, blood pressure, pulse and respiration. Work as part of a health care team to assess patient needs, plan and modify care and implement interventions. Collect samples such as blood, urine and sputum from patients, and perform routine laboratory tests on samples. Prepare patients for examinations, tests or treatments and explain procedures. Assemble and use equipment such as catheters, tracheotomy tubes, and oxygen suppliers.

Skills:

WorkKeys Scores WorkKeys explanation on page ii

Applied Math	4	Workplace Docs	4	Graphic Literacy	4
Applied Technology		Workplace Observ.	3		

Personal Skills Required for this Career:

Service Orientation, Active Listening, Coordination, Monitoring, Reading Comprehension

Top Industries: [Health Care and Social Assistance](#)

Education:

- Most occupations in this zone require training in vocational schools, related on-the-job experience, or an associate's degree.
- Previous work-related skill, knowledge, or experience is required for these occupations.
- Employees in these occupations usually need one or two years of training involving both on-the-job experience and informal training with experienced workers. A recognized apprenticeship program may be associated with these occupations.

Educational Institutions:

- Indiana University Kokomo
- Ivy Tech Community College

Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$16.19	\$22.23	\$29.88
	Yearly	\$33,680	\$46,240	\$62,160
Indiana	Hourly	\$16.52	\$21.46	\$26.34
	Yearly	\$34,370	\$44,640	\$54,780

Employment Trends: Appendix A

Website for further information: www.napnes.org

Machinist



Description: Set up and operate a variety of machine tools to produce precision parts and instruments. Includes precision instrument makers who fabricate, modify, or repair mechanical instruments. May also fabricate and modify parts to make or repair machine tools or maintain industrial machines, applying knowledge of mechanics, shop mathematics, metal properties, layout, and machining procedures.

Tasks: Calculate dimensions and tolerances using knowledge of mathematics and instruments such as micrometers and vernier calipers. Align and secure holding fixtures, cutting tools, attachments, accessories, and materials onto machines. Select the appropriate tools, machines, and materials to be used in preparation of machinery work. Monitor the feed and speed of machines during the machining process. Machine parts to specifications using machine tools such as lathes, milling machines, shapers, or grinders. Set up, adjust, and operate all of the basic machine tools and many specialized or advanced variation tools to perform precision machining operations. Measure, examine, and test completed units to detect defects and ensure conformance to specifications, using precision instruments such as micrometers. Set controls to regulate machining, or enter commands to retrieve, input, or edit computerized machine control media. Position and fasten work pieces. Maintain industrial machines, applying knowledge of mechanics, shop mathematics, metal properties, layout, and machining procedures.

Skills:

WorkKeys Scores WorkKeys explanation on page ii

Applied Math	4	Workplace Docs	4	Graphic Literacy	4
Applied Technology	4	Workplace Observ.	3		

Personal Skills Required for this Career:

Operation Monitoring, Critical Thinking, Operation and Control, Active Listening, Coordination

Top Industries: [Manufacturing](#)

Education:

- Most occupations in this zone require training in vocational schools, related on-the-job experience, or an associate's degree.
- Previous work-related skill, knowledge, or experience is required for these occupations.
- Employees in these occupations usually need one or two years of training involving both on-the-job experience and informal training with experienced workers. A recognized apprenticeship program may be associated with these occupations.

Educational Institutions:

- Area Career Centers
- Ivy Tech Community College

Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$13.01	\$20.97	\$31.43
	Yearly	\$27,050	\$43,630	\$65,360
Indiana	Hourly	\$13.76	\$20.62	\$29.99
	Yearly	\$28,620	\$42,880	\$62,370

Employment Trends: Appendix A

Website for further information: www.pmpa.org

Maintenance and Repair Worker, General



Bright Outlook

Description: Perform work involving the skills of two or more maintenance or craft occupations to keep machines, mechanical equipment, or the structure of an establishment in repair. Duties may involve pipe fitting; boiler making; insulating; welding; machining; carpentry; repairing electrical or mechanical equipment; installing, aligning, and balancing new equipment; and repairing buildings, floors, or stairs.

Tasks: Inspect, operate, or test machinery or equipment to diagnose machine malfunctions. Dismantle machines, equipment, or devices to access and remove defective parts, using hoists, cranes, hand tools, or power tools. Perform routine maintenance, such as inspecting drives, motors, or belts, checking fluid levels, replacing filters, or doing other preventive maintenance actions. Diagnose mechanical problems and determine how to correct them, checking blueprints, repair manuals, or parts catalogs, as necessary. Repair machines, equipment, or structures, using tools such as hammers, hoists, saws, drills, wrenches, or equipment such as precision measuring instruments or electrical or electronic testing devices. Assemble, install, or repair wiring, electrical or electronic components, pipe systems, plumbing, machinery, or equipment. Clean or lubricate shafts, bearings, gears, or other parts of machinery. Adjust functional parts of devices or control instruments, using hand tools, levels, plumb bobs, or straightedges. Operate cutting torches or welding equipment to cut or join metal parts. Record type and cost of maintenance or repair work.

Skills:

WorkKeys Scores WorkKeys explanation on page ii

Applied Math	4	Workplace Docs	4	Graphic Literacy	4
Applied Technology	4	Workplace Observ.	3		

Personal Skills Required for this Career:

Equipment Maintenance, Repairing, Troubleshooting, Critical Thinking, Equipment Selection

Top Industries: [Manufacturing](#) and [Real Estate and Rental and Leasing](#)

Education:

- Most occupations in this zone require training in vocational schools, related on-the-job experience, or an associate's degree.
- Previous work-related skill, knowledge, or experience is required for these occupations.
- Employees in these occupations usually need one or two years of training involving both on-the-job experience and informal training with experienced workers.

Educational Institutions:

- Ivy Tech Community College

Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$11.32	\$18.42	\$30.00
	Yearly	\$23,540	\$38,300	\$62,400
Indiana	Hourly	\$11.58	\$18.65	\$28.74
	Yearly	\$24,080	\$38,800	\$59,780

Employment Trends: Appendix A

Website for further information: <http://www.bls.gov/ooh/installation-maintenance-and-repair/general-maintenance-and-repair-workers.htm>

Maintenance Workers, Machinery

Description: Lubricate machinery, change parts, or perform other routine machinery maintenance.

Tasks: Start machines and observe mechanical operation to determine efficiency and to detect problems. Read work orders and specifications to determine machines and equipment requiring repair or maintenance. Inspect or test damaged machine parts, and mark defective areas or advise supervisors of repair needs. Reassemble machines after the completion of repair or maintenance work. Dismantle machines and remove parts for repair, using hand tools, chain falls, jacks, cranes, or hoists. Install, replace, or change machine parts and attachments, according to production specifications. Collaborate with other workers to repair or move machines, machine parts, or equipment. Inventory and requisition machine parts, equipment, and other supplies so that stock can be maintained and replenished.

Skills:

WorkKeys Scores WorkKeys explanation on page ii

Applied Math	4	Workplace Docs	4	Graphic Literacy	4
Applied Technology	4	Workplace Observ.	3		

Personal Skills Required for this Career:

Equipment Maintenance, Operation Monitoring, Repairing, Troubleshooting, Operation and Control

Top Industries: [Manufacturing](#)

Education:

- Most occupations in this zone require training in vocational schools, related on-the-job experience, or an associate's degree.
- Previous work-related skill, knowledge, or experience is required for these occupations.
- Employees in these occupations usually need one or two years of training involving both on-the-job experience and informal training with experienced workers.

Educational Institutions:

- Ivy Tech Community College

Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$14.02	\$22.63	\$34.60
	Yearly	\$29,170	\$47,060	\$71,960
Indiana	Hourly	\$16.35	\$18.67	\$30.63
	Yearly	\$34,020	\$47,620	\$63,710

Employment Trends: Appendix A

Website for further information: [Occupational Outlook Handbook: Industrial machinery mechanics, machinery maintenance workers, and millwrights](#)

Management Analyst

Description: Conduct organizational studies and evaluations, design systems and procedures, conduct work simplifications and measurement studies, and prepare operations and procedures manuals to assist management in operating more efficiently and effectively. Includes program analysts and management consultants.

Tasks: Document findings of study and prepare recommendations for implementation of new systems, procedures, or organizational changes. Interview personnel and conduct on-site observation to ascertain unit functions, work performed, and methods, equipment, and personnel used. Analyze data gathered and develop solutions or alternative methods of proceeding. Plan study of work problems and procedures, such as organizational change, communications, information flow, integrated production methods, inventory control, or cost analysis. Confer with personnel concerned to ensure successful functioning of newly implemented systems or procedures. Develop and implement records management program for filing, protection, and retrieval of records, and assure compliance with program. Review forms and reports and confer with management and users about format, distribution, and purpose, and to identify problems and improvements. Document findings of study and prepare recommendations for implementation of new systems, procedures, or organizational changes. Prepare manuals and train workers in use of new forms, reports, procedures or equipment, according to organizational policy.

Skills:

WorkKeys Scores WorkKeys explanation on page ii

Applied Math	4	Workplace Docs	4	Graphic Literacy	4
Applied Technology		Workplace Observ.	4		

Personal Skills Required for this Career:

Active Listening, Critical Thinking, Reading Comprehension, Judgment and Decision Making, Speaking

Top Industries: [Professional, Scientific, and Technical Services](#) and [Self-Employed](#)

Education:

- Most of these occupations require graduate school.
- Extensive skill, knowledge, and experience are needed for these occupations. Many require more than five years of experience.
- Employees may need some on-the-job training, but most of these occupations assume that the person will already have the required skills, knowledge, work-related experience, and/or training.

Educational Institutions:

- Indiana University Kokomo
- Ivy Tech Community College
- Purdue University

Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$23.25	\$40.20	\$73.44
	Yearly	\$48,360	\$83,610	\$152,760
Indiana	Hourly	\$20.13	\$36.68	\$61.62
	Yearly	\$41,870	\$76,300	\$128,170

Employment Trends: Appendix A

Website for further information: www.amcf.org

Mechanical Engineer



Description: Perform engineering duties in planning and designing tools, engines, machines, and other mechanically functioning equipment. Oversee installation, operation, maintenance, and repair of equipment such as centralized heat, gas, water, and steam systems.

Tasks: Read and interpret blueprints, technical drawings, schematics, or computer-generated reports. Research, design, evaluate, install, operate, or maintain mechanical products, equipment, systems or processes to meet requirements. Confer with engineers or other personnel to implement operating procedures, resolve system malfunctions, or provide technical information. Develop, coordinate, or monitor all aspects of production, including selection of manufacturing methods, fabrication, or operation of product designs. Develop or test models of alternate designs or processing methods to assess feasibility, sustainability, operating condition effects, potential new applications, or necessity of modification. Specify system components or direct modification of products to ensure conformance with engineering design, performance specifications, or environmental regulations. Oversee installation, operation, maintenance, or repair to ensure that machines or equipment are installed and functioning according to specifications. Conduct research that tests or analyzes the feasibility, design, operation, or performance of equipment, components, or systems. Research and analyze customer design proposals, specifications, manuals, or other data to evaluate the feasibility, cost, or maintenance requirements of designs or applications.

Skills:

WorkKeys Scores WorkKeys explanation on page ii

Applied Math	6	Workplace Docs	6	Graphic Literacy	6
Applied Technology	6	Workplace Observ.	4		

Personal Skills Required for this Career:

Active Listening, Critical Thinking, Mathematics, Reading Comprehension, Science

Top Industries: [Manufacturing](#) and [Professional, Scientific, and Technical Services](#)

Education:

- Most of these occupations require a four-year bachelor's degree, but some do not.
- A considerable amount of work-related skill, knowledge, or experience is needed for these occupations.
- Employees in these occupations usually need several years of work-related experience, on-the-job training, and/or vocational training.

Educational Institutions:

- Purdue University

Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$27.05	\$42.00	\$65.65
	Yearly	\$56,270	\$87,370	\$136,550
Indiana	Hourly	\$25.11	\$37.30	\$58.22
	Yearly	\$52,220	\$77,580	\$121,100

Employment Trends: Appendix A

Website for further information: www.asme.org

Medical and Health Services Manager



Description: Plan, direct, or coordinate medicine and health services in hospitals, clinics, managed care organizations, public health agencies, or similar organizations.

Tasks: Develop and maintain computerized record management systems to store and process data, such as personnel activities and information, and to produce reports. Direct, supervise and evaluate work activities of medical, nursing, technical, clerical, service, maintenance, and other personnel. Direct or conduct recruitment, hiring, and training of personnel. Develop and implement organizational policies and procedures for the facility or medical unit. Conduct and administer fiscal operations, including accounting, planning budgets, authorizing expenditures, establishing rates for services, and coordinating financial reporting. Maintain communication between governing boards, medical staff, and department heads by attending board meetings and coordinating interdepartmental functioning. Review and analyze facility activities and data to aid planning and cash and risk management and to improve service utilization. Plan, implement and administer programs and services in a health care or medical facility, including personnel administration, training, and coordination of medical, nursing and physical plant staff. Direct or conduct recruitment, hiring and training of personnel. Establish work schedules and assignments for staff, according to workload, space and equipment availability. Monitor the use of diagnostic services, inpatient beds, facilities, and staff to ensure effective use of resources and assess the need for additional staff, equipment, and services. Establish objectives and evaluative or operational criteria for units they manage. Develop and implement organizational policies and procedures for the facility or medical unit.

Skills:

WorkKeys Scores WorkKeys explanation on page ii

Applied Math	4	Workplace Docs	4	Graphic Literacy	4
Applied Technology		Workplace Observ.	4		

Personal Skills Required for this Career:

Speaking, Critical Thinking, Active Listening, Coordination, Judgement and Decision Making

Top Industries: [Health Care and Social Assistance](#)

Education:

- Most of these occupations require graduate school.
- Extensive skill, knowledge, and experience are needed for these occupations. Many require more than five years of experience. For example, surgeons must complete four years of college and an additional five to seven years of specialized medical training to be able to do their job.
- Employees may need some on-the-job training, but most of these occupations assume that the person will already have the required skills, knowledge, work-related experience, and/or training.

Educational Institutions:

- Indiana University Kokomo
- Purdue University

Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$28.21	\$47.95	\$87.79
	Yearly	\$58,680	\$99,730	\$182,600
Indiana	Hourly	\$26.25	\$43.46	\$75.17
	Yearly	\$54,590	\$90,410	\$156,360

Employment Trends: Appendix A

Website for further information: [American Health Information Management Association](#)

Medical Assistants

Description: Perform administrative and certain clinical duties under the direction of a physician. Administrative duties may include scheduling appointments, maintaining medical records, billing, and coding information for insurance purposes. Clinical duties may include taking and recording vital signs and medical histories, preparing patients for examination, drawing blood, and administering medications as directed by physician.

Tasks: Record patients' medical history, vital statistics, or information such as test results in medical records. Prepare treatment rooms for patient examinations, keeping the rooms neat and clean. Interview patients to obtain medical information and measure their vital signs, weight, and height. Show patients to examination rooms and prepare them for the physician. Prepare and administer medications as directed by a physician. Collect blood, tissue, or other laboratory specimens, log the specimens, and prepare them for testing. Authorize drug refills and provide prescription information to pharmacies. Explain treatment procedures, medications, diets, or physicians' instructions to patients. Clean and sterilize instruments and dispose of contaminated supplies. Perform routine laboratory tests and sample analyses.

Skills:

WorkKeys Scores WorkKeys explanation on page ii

Applied Math	4	Workplace Docs	4	Graphic Literacy	4
Applied Technology		Workplace Observ.	3		

Personal Skills Required for this Career:

Speaking, Active Listening, Reading Comprehension, Social Perceptiveness, Monitoring

Top Industries: [Health Care and Social Assistance](#)

Education:

- Most occupations in this zone require training in vocational schools, related on-the-job experience, or an associate's degree.
- Previous work-related skill, knowledge, or experience is required for these occupations.
- Employees in these occupations usually need one or two years of training involving both on-the-job experience and informal training with experienced workers. A recognized apprenticeship program may be associated with these occupations.

Educational Institutions:

- Indiana University Kokomo
- Purdue University

Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$11.92	\$16.16	\$22.72
	Yearly	\$24,790	\$33,610	\$47,250
Indiana	Hourly	\$12.16	\$15.44	\$19.47
	Yearly	\$25,300	\$32,110	\$40,490

Employment Trends: Appendix A

Website for further information: [American Association of Medical Assistants](#)



Description: Install, dismantle, or move machinery and heavy equipment according to layout plans, blueprints, or other drawings.

Tasks: Insert shims, adjust tension on nuts and bolts, or position parts, using hand tools and measuring instruments, to set specified clearances between moving and stationary parts. Level bedplate and establish centerline, using straightedge, levels, and transit. Align machines or equipment, using hoists, jacks, hand tools, squares, rules, micrometers, lasers, or plumb bobs. Assemble and install equipment, using hand tools and power tools. Signal crane operator to lower basic assembly units to bedplate, and align unit to centerline. Conduct preventative maintenance and repair, and lubricate machines and equipment. Replace defective parts of machine or adjust clearances and alignment of moving parts. Attach moving parts and subassemblies to basic assembly unit, using hand tools and power tools. Assemble machines, and bolt, weld, rivet, or otherwise fasten them to foundation or other structures, using hand tools and power tools. Lay out mounting holes, using measuring instruments, and drill holes with power drill.

Skills:

WorkKeys Scores WorkKeys explanation on page ii

Applied Math	4	Workplace Docs	4	Graphic Literacy	4
Applied Technology	4	Workplace Observ.	3		

Personal Skills Required for this Career:

Operation Monitoring, Equipment Maintenance Installation Critical Thinking Repairing

Top Industries: [Manufacturing](#)

Education:

- These occupations usually require a high school diploma.
- Some previous work-related skill, knowledge, or experience is usually needed.
- Employees in these occupations usually need one or two years of training involving both on-the-job experience and informal training with experienced workers. A recognized apprenticeship program may be associated with these occupations.

Educational Institutions:

- Area Career Centers
- Ivy Tech Community College

Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$16.39	\$26.47	\$38.78
	Yearly	\$34,090	\$55,060	\$80,660
Indiana	Hourly	\$16.50	\$25.92	\$36.66
	Yearly	\$34,310	\$53,920	\$76,260

Employment Trends: Appendix A

Website for further information: [Independent Millwright Contractors Association](#)

Network and Computer Systems Administrator



Description: Install, configure, and support an organization's local area network (LAN), wide area network (WAN), and Internet systems or a segment of a network system. Monitor network to ensure network availability to all system users and may perform necessary maintenance to support network availability. May monitor and test Web site performance to ensure Web sites operate correctly and without interruption.

Tasks: Maintain and administer computer networks and related computing environments including computer hardware, systems software, applications software, and all configurations. Perform data backups and disaster recovery operations. Diagnose, troubleshoot, and resolve hardware, software, or other network and system problems, and replace defective components when necessary. Configure, monitor, and maintain email applications or virus protection software. Operate master consoles to monitor the performance of computer systems and networks, and to coordinate computer network access and use. Monitor network performance to determine whether adjustments need to be made, and to determine where changes will need to be made in the future. Plan, coordinate, and implement network security measures to protect data, software, and hardware. Analyze equipment performance records to determine the need for repair or replacement. Confer with network users about how to solve existing system problems..

Skills:

WorkKeys Scores WorkKeys explanation on page ii

Applied Math	5	Workplace Docs	5	Graphic Literacy	4
Applied Technology		Workplace Observ.	4		

Personal Skills Required for this Career:

Critical Thinking, Judgement and Decision Making, Reading Comprehension, Systems Analysis, Active Listening

Top Industries: [Professional, Scientific, and Technical Services](#) and [Educational Services](#)

Education:

- Most require a four-year bachelor's degree, but some do not.
- A considerable amount of work-related skill, knowledge or experience is needed for these occupations.
- Employees in these occupations usually need several years of work-related experience, on-the-job training, and/or vocation training.

Educational Institutions:

- Ivy Tech Community College
- Indiana University Kokomo
- Indiana Wesleyan University
- Purdue University

Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$24.51	\$39.45	\$62.85
	Yearly	\$50,990	\$82,050	\$130,720
Indiana	Hourly	\$21.31	\$34.25	\$55.11
	Yearly	\$44,320	\$71,230	\$114,630

Employment Trends: Appendix A

Website for further information: [Occupational Outlook Handbook: Network and computer systems administrators](#)

Nursing Assistant

Description: Provide basic patient care under direction of nursing staff. Perform duties such as feed, bathe, dress, groom or move patients, or change linens. May transfer or transport patients.

Tasks: Answer patient call signals, signal lights, bells, or intercom systems to determine patients' needs. Turn or reposition bedridden patients. Provide physical support to assist patients to perform daily living activities, such as getting out of bed, bathing, dressing, using the toilet, standing, walking, or exercising. Measure and record food and liquid intake or urinary and fecal output, reporting changes to medical or nursing staff. Record vital signs, such as temperature, blood pressure, pulse, or respiration rate, as directed by medical or nursing staff. Observe or examine patients to detect symptoms that may require medical attention, such as bruises, open wounds, or blood in urine. Remind patients to take medications or nutritional supplements. Feed patients or assist patients to eat or drink. Undress, wash, and dress patients who are unable to do so for themselves. Collect specimens, such as urine, feces, or sputum. Apply clean dressings, slings, stockings, or support bandages, under direction of nurse or physician. Restock patient rooms with personal hygiene items, such as towels, washcloths, soap, or toilet paper. Exercise patients who are comatose, paralyzed, or have restricted mobility. Assist nurses or physicians in the operation of medical equipment or provision of patient care. Transport patients to treatment units, testing units, operating rooms, or other areas, using wheelchairs, stretchers, or moveable beds.

Skills:

WorkKeys Scores WorkKeys explanation on page ii

Applied Math	3	Workplace Docs	4	Graphic Literacy	4
Applied Technology		Workplace Observ.	2		

Personal Skills Required for this Career:

Service Orientation, Active Listening, Social Perceptiveness, Coordination, Monitoring

Top Industries: [Health Care and Social Assistance](#)

Education:

- These occupations usually require a high school diploma.
- Some previous work-related skill, knowledge, or experience is usually needed.
- Employees in these occupations usually need one or two years of training involving both on-the-job experience and informal training with experienced workers. A recognized apprenticeship program may be associated with these occupations.

Educational Institutions:

- Area Career Centers
- Ivy Tech Community College

Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$10.24	\$13.72	\$19.02
	Yearly	\$21,290	\$28,540	\$39,560
Indiana	Hourly	\$10.21	\$12.09	\$16.39
	Yearly	\$21,240	\$26,830	\$34,080

Employment Trends: Appendix A

Website for further information: <http://www.bls.gov/ooh/healthcare/nursing-assistants.htm>

Occupational Therapist

Description: Assess, plan, organize, and participate in rehabilitative programs that help build or restore vocational, homemaking, and daily living skills, as well as general independence, to persons with disabilities or developmental delays.

Tasks: Complete and maintain necessary records. Test and evaluate patients' physical and mental abilities and analyze medical data to determine realistic rehabilitation goals for patients. Train caregivers how to provide for the needs of a patient during and after therapy. Evaluate patients' progress and prepare reports that detail progress. Plan, organize, and conduct occupational therapy programs in hospital, institutional, or community settings to help rehabilitate those impaired because of illness, injury or psychological or developmental problems. Select activities that will help individuals learn work and life-management skills within limits of their mental or physical capabilities. Recommend changes in patients' work or living environments, consistent with their needs and capabilities. Design and create, or requisition, special supplies and equipment, such as splints, braces, and computer-aided adaptive equipment. Plan and implement programs and social activities to help patients learn work or school skills and adjust to handicaps. Help clients improve decision making, abstract reasoning, memory, sequencing, coordination, and perceptual skills, using computer programs.

Skills:

WorkKeys Scores WorkKeys explanation on page ii

Applied Math	4	Workplace Docs	6	Graphic Literacy	5
Applied Technology		Workplace Observ.	3		

Personal Skills Required for this Career:

Monitoring, Service Orientation Active Listening, Critical Thinking, Judgement and Decision Making

Top Industries: [Health Care and Social Assistance](#) and [Educational Services](#)

Education:

- Most of these occupations require graduate school.
- Extensive skill, knowledge, and experience are needed for these occupations. Many require more than five years of experience.
- Employees may need some on-the-job training, but most of these occupations assume that the person will already have the required skills, knowledge, work-related experience, and/or training.

Educational Institutions:

- Purdue University

Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$26.68	\$40.51	\$58.05
	Yearly	\$55,490	\$84,270	\$120,750
Indiana	Hourly	\$25.57	\$39.24	\$50.01
	Yearly	\$53,180	\$81,610	\$104,010

Employment Trends: Appendix A

Website for further information: www.aota.org

Pharmacist

Description: Dispense drugs prescribed by physicians and other health practitioners and provide information to patients about medications and their use. May advise physicians and other health practitioners on the selection, dosage, interactions, and side effects of medications.

Tasks: Review prescriptions to assure accuracy, to ascertain the needed ingredients, and to evaluate their suitability. Provide information and advice regarding drug interactions, side effects, dosage and proper medication storage. Assess the identity, strength and purity of medications. Maintain records, such as pharmacy files, patient profiles, charge system files, inventories, control records for radioactive nuclei, and registries of poisons, narcotics, and controlled drugs. Compound and dispense medications as prescribed by doctors and dentists, by calculating, weighing, measuring, and mixing ingredients, or oversee these activities. Plan, implement, and maintain procedures for mixing, packaging, and labeling pharmaceuticals, according to policy and legal requirements, to ensure quality, security, and proper disposal. Teach pharmacy students serving as interns in preparation for their graduation or licensure. Advise customers on the selection of medication brands, medical equipment and health-care supplies. Provide specialized services to help patients manage conditions such as diabetes, asthma, smoking cessation, or high blood pressure.

Skills:

WorkKeys Scores WorkKeys explanation on page ii

Applied Math	6	Workplace Docs	7	Graphic Literacy	7
Applied Technology		Workplace Observ.	5		

Personal Skills Required for this Career:

Reading Comprehension, Active Listening, Critical Thinking, Instructing, Monitoring

Top Industries: [Retail Trade](#) and [Health Care and Social Assistance](#)

Education:

- Most of these occupations require graduate school.
- Extensive skill, knowledge, and experience are needed for these occupations. Many require more than five years of experience.
- Employees may need some on-the-job training, but most of these occupations assume that the person will already have the required skills, knowledge, work-related experience, and/or training.

Educational Institutions:

- Purdue University

Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$42.21	\$60.64	\$77.53
	Yearly	\$87,790	\$126,120	\$161,250
Indiana	Hourly	\$37.86	\$59.50	\$75.68
	Yearly	\$78,686	\$123,770	\$157,410

Employment Trends: Appendix A

Website for further information: www.nabp.net

Pharmacy Technician



Description: Prepare medications under the direction of a pharmacist. May measure, mix, count out, label, and record amounts and dosages of medications according to prescription orders.

Tasks: Receive written prescription or refill requests and verify that information is complete and accurate. Prepack bulk medicines, fill bottles with prescribed medications, and type and affix labels. Answer telephones, responding to questions or requests. Maintain proper storage and security conditions for drugs. Assist customers by answering simple questions, locating items, or referring them to the pharmacist for medication information. Price and file prescriptions that have been filled. Establish or maintain patient profiles, including lists of medications taken by individual patients. Order, label, and count stock of medications, chemicals, or supplies and enter inventory data into computer. Receive and store incoming supplies, verify quantities against invoices, check for outdated medications in current inventory, and inform supervisors of stock needs and shortages. Mix pharmaceutical preparations, according to written prescriptions. Clean and help maintain equipment or work areas and sterilize glassware, according to prescribed methods. Transfer medication from vials to the appropriate number of sterile, disposable syringes, using aseptic techniques.

Skills:

WorkKeys Scores WorkKeys explanation on page ii

Applied Math	4	Workplace Docs	4	Graphic Literacy	4
Applied Technology		Workplace Observ.	2		

Personal Skills Required for this Career:

Active Listening, Reading Comprehension, Speaking, Critical Thinking, Monitoring

Top Industries: [Retail Trade](#) and [Health Care and Social Assistance](#)

Education:

- Most occupations in this zone require training in vocational schools, related on-the-job experience, or an associate's degree.
- Previous work-related skill, knowledge, or experience is required for these occupations.
- Employees in these occupations usually need one or two years of training involving both on-the-job experience and informal training with experienced workers. A recognized apprenticeship program may be associated with these occupations.

Educational Institutions:

- Ivy Tech Community College

Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$10.93	\$12.86	\$23.08
	Yearly	\$22,740	\$32,700	\$48,010
Indiana	Hourly	\$10.42	\$14.77	\$19.66
	Yearly	\$21,680	\$30,720	\$40,900

Employment Trends: Appendix A

Website for further information: www.ashp.net

Plumbers, Pipefitters and Steamfitters



Description: Assemble, install, alter, and repair pipelines or pipe systems that carry water, steam, air, or other liquids or gases. May install heating and cooling equipment and mechanical control systems. Includes sprinklerfitters.

Tasks: Cut, thread, or hammer pipes to specifications, using tools such as saws, cutting torches, pipe threaders, or pipe benders. Lay out full scale drawings of pipe systems, supports, or related equipment, according to blueprints. Assemble or secure pipes, tubes, fittings, or related equipment, according to specifications, by welding, brazing, cementing, soldering, or threading joints. Measure and mark pipes for cutting or threading. Inspect, examine, or test installed systems or pipe lines, using pressure gauge, hydrostatic testing, observation, or other methods. Plan pipe system layout, installation, or repair, according to specifications. Attach pipes to walls, structures, or fixtures, such as radiators or tanks, using brackets, clamps, tools, or welding equipment. Modify, clean, or maintain pipe systems, units, fittings, or related machines or equipment, using hand or power tools. Select pipe sizes, types, or related materials, such as supports, hangers, or hydraulic cylinders, according to specifications. Install automatic controls to regulate pipe systems. Remove and replace worn components. Inspect work sites for obstructions or holes that could cause structural weakness. Install fixtures, appliances, or equipment designed to reduce water or energy consumption. Install pipe systems to support alternative energy-fueled systems, such as geothermal heating and cooling systems. Install or test gray water systems, such as recycling, treatment, or irrigation systems.

Skills:

WorkKeys Scores WorkKeys explanation on page ii

Applied Math	4	Workplace Docs	4	Graphic Literacy	4
Applied Technology	4	Workplace Observ.	2		

Personal Skills Required for this Career:

Active Listening, Critical Thinking, Reading Comprehension, Speaking, Time Management

Top Industries: [Construction](#) and [Self-Employed](#)

Education:

- Most occupations in this zone require training in vocational schools, related on-the-job experience, or an associate's degree.
- Previous work-related skill, knowledge, or experience is required for these occupations.
- Employees in these occupations usually need one or two years of training involving both on-the-job experience and informal training with experienced workers. A recognized apprenticeship program may be associated with these occupations.

Educational Institutions:

- Ivy Tech Community College

Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$15.43	\$25.92	\$45.05
	Yearly	\$32,100	\$53,910	\$93,700
Indiana	Hourly	\$16.23	\$27.89	\$44.09
	Yearly	\$33,700	\$58,010	\$91,710

Employment Trends: Appendix A

Website for further information: <http://www.bls.gov/OOH/construction-and-extraction/plumbers-pipefitters-and-steamfitters.htm>

Police and Sheriff Patrol Officer

Description: Police: Patrol assigned area to enforce laws and ordinances, regulate traffic, control crowds, prevent crime, and arrest violators. Sheriff: Enforce law and order in rural or unincorporated districts or serve legal processes of courts. May patrol courthouse, guard court or grand jury, or escort defendants.

Tasks: Police - Provide for public safety by maintaining order, responding to emergencies, protecting people and property, enforcing motor vehicle and criminal laws, and promoting good community relations. Identify, pursue, and arrest suspects and perpetrators of criminal acts. Record facts to prepare reports that document incidents and activities. Review facts of incidents to determine if criminal act or statute violations were involved. Render aid to accident victims and other persons requiring first aid for physical injuries. Testify in court to present evidence or act as witness in traffic and criminal cases. Evaluate complaint and emergency-request information to determine response requirements. Patrol specific area on foot, horseback, or motorized conveyance responding promptly to calls for assistance. Monitor, note, report, and investigate suspicious persons and situations, safety hazards, and unusual or illegal activity in patrol area. Investigate traffic accidents and other accidents to determine causes and to determine if a crime has been committed.

Sheriff - Drive vehicles or patrol specific areas to detect law violators, issue citations, and make arrests. Execute arrest warrants. Investigate illegal or suspicious activities. Notify patrol units to take violators into custody or provide assistance or medical aid. Question individuals entering secured areas. Record daily activities and submit logs. Serve statements of claims, subpoenas, summonses, jury summonses, orders to pay alimony. Take control of accident scenes. Patrol and guard the courthouse, and jury rooms.

Skills:

WorkKeys Scores WorkKeys explanation on page ii

Applied Math	4	Workplace Docs	4	Graphic Literacy	4
Applied Technology	4	Workplace Observ.	2		

Personal Skills Required for this Career:

Active Listening, Critical Thinking, Speaking, Monitoring, Social Perceptiveness

Top Industries: [Government](#)

Education:

- Most occupations in this zone require training in vocational schools, related on-the-job experience, or an associate's degree.
- Previous work-related skill, knowledge, or experience is required for these occupations.
- Employees in these occupations usually need one or two years of training involving both on-the-job experience and informal training with experienced workers.

Educational Institutions:

- Ivy Tech Community College
- Indiana University Kokomo
- Purdue University

Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$17.19	\$29.51	\$48.86
	Yearly	\$35,750	\$61,380	\$101,620
Indiana	Hourly	\$17.76	\$26.23	\$36.91
	Yearly	\$36,930	\$54,570	\$76,780

Employment Trends: Appendix A

Website for more information: www.sheriffs.org

Postsecondary Teacher

Description: Teach courses pertaining to specific line of study. (i.e. Physics, English, Science, Education, etc.)

Tasks: Initiate, facilitate, and moderate classroom discussions. Evaluate and grade students' class work, assignments, and papers. Prepare course materials such as syllabi, homework assignments, and handouts. Prepare and deliver lectures to undergraduate or graduate students on topics such as poetry, novel structure, and translation and adaptation. Maintain student attendance records, grades, and other required records. Plan, evaluate, and revise curricula, course content, course materials, and methods of instruction. Compile, administer, and grade examinations, or assign this work to others. Maintain regularly scheduled office hours to advise and assist students. Keep abreast of developments in the field by reading current literature, talking with colleagues, and participating in professional conferences. Select and obtain materials and supplies such as textbooks.

Skills:

WorkKeys Scores WorkKeys explanation on page ii

Applied Math	5	Workplace Docs	7	Graphic Literacy	6
Applied Technology		Workplace Observ.	3		

Personal Skills Required for this Career:

Reading Comprehension, Instructing, Writing, Speaking, Active Listening

Top Industries: [Educational Services](#)

Education:

- Most of these occupations require graduate school.
- Extensive skill, knowledge, and experience are needed for these occupations. Many require more than five years of experience.
- Employees may need some on-the-job training, but most of these occupations assume that the person will already have the required skills, knowledge, work-related experience, and/or training.

Educational Institutions:

- Indiana University Kokomo
- Purdue University

Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	-	-	-
	Yearly	\$27,490	\$65,660	\$136,490
Indiana	Hourly	-	-	-
	Yearly	\$21,360	\$58,970	\$119,200

Employment Trends: Appendix A

Website for further information: <http://www.bls.gov/ooh/education-training-and-library/postsecondary-teachers.htm>

Preschool, Primary, Secondary and Special Ed School Teachers



Description: Teach students basic academic, social, and other formative skills in public or private schools at the elementary level. Teach elementary school subjects to educationally and physically handicapped students. Includes teachers who specialize and work with audibly and visually handicapped students and those who teach basic academic and life processes skills to the mentally impaired.

Tasks: Instruct students individually and in groups, using various teaching methods such as lectures, discussions, and demonstrations. Adapt teaching methods and instructional materials to meet students' varying needs and interests. Establish clear objectives for all lessons, units, and projects and communicate those objectives to students. Establish and enforce rules for behavior and procedures for maintaining order among the students for whom they are responsible. Meet with parents and guardians to discuss their children's progress and to determine priorities for their children and their resource needs. Prepare materials and classrooms for class activities. Observe and evaluate students' performance, behavior, social development, and physical health. Provide a variety of materials and resources for children to explore, manipulate, and use, both in learning activities and in imaginative play. Prepare and implement remedial programs for students requiring extra help. Prepare, administer, and grade tests and assignments to evaluate students' progress. Guide and counsel students with adjustment or academic problems, or special academic interests. Maintain accurate and complete student records as required by laws, district policies, and administrative regulations. Prepare objectives and outlines for courses of study, following curriculum guidelines or requirements of states and schools. Supervise, evaluate, and plan assignments for teacher assistants and volunteers. Administer standardized ability and achievement tests and interpret results to determine student strengths and areas of need. Provide disabled students with assistive devices, supportive technology, and assistance accessing facilities.

Skills:

WorkKeys Scores WorkKeys explanation on page ii

Applied Math	4	Workplace Docs	6	Graphic Literacy	5
Applied Technology		Workplace Observ.	3		

Personal Skills Required for this Career:

Instructing, Speaking, Active Listening, Learning Strategies, Reading Comprehension

Top Industries: [Educational Services](#)

Education:

- Most of these occupations require a four-year bachelor's degree, but some do not.
- A considerable amount of work-related skill, knowledge, or experience is needed for these occupations.
- Employees in these occupations usually need several years of work-related experience, on-the-job training, and/or vocational training.

Educational Institutions:

- Indiana University Kokomo
- Purdue University

Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	-	-	-
	Yearly	\$39,090	\$58,600	\$93,180
Indiana	Hourly	-	-	-
	Yearly	\$35,100	\$49,900	\$75,500

Employment Trends: Appendix A

Website for more information: <http://www.bls.gov/OOH/education-training-and-library/kindergarten-and-elementary-school-teachers.htm>

Registered Nurse (RN)

Description: Assess patient health problems and needs, develop and implement nursing care plans, and maintain medical records. Administer nursing care to ill, injured, convalescent, or disabled patients. May advise patients on health maintenance and disease prevention or provide case management. Licensing or registration required.

Tasks: Monitor, record and report symptoms and changes in patients' conditions. Maintain accurate, detailed reports and records. Record patients' medical information and vital signs. Order, interpret, and evaluate diagnostic tests to identify and assess patient's condition. Modify patient treatment plans as indicated by patients' responses and conditions. Direct and supervise less skilled nursing or health care personnel or supervise a particular unit. Consult and coordinate with health care team members to assess, plan, implement and evaluate patient care plans. Monitor all aspects of patient care, including diet and physical activity. Instruct individuals, families and other groups on topics such as health education, disease prevention and childbirth, and develop health improvement programs. Prepare patients for, and assist with, examinations and treatments.

Skills:

WorkKeys Scores WorkKeys explanation on page ii

Applied Math	5	Workplace Docs	5	Graphic Literacy	4
Applied Technology		Workplace Observ.	3		

Personal Skills Required for this Career:

Active Listening, Social Perceptiveness, Service Orientation Speaking, Coordination

Top Industries: [Health Care and Social Assistance](#)

Education:

- Most occupations in this zone require training in vocational schools, related on-the-job experience, or an associate's degree.
- Previous work-related skill, knowledge, or experience is required for these occupations.
- Employees in these occupations usually need one or two years of training involving both on-the-job experience and informal training with experienced workers.

Educational Institutions:

- Ivy Tech Community College
- Indiana University Kokomo
- Purdue University

Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$24.42	\$34.48	\$51.22
	Yearly	\$50,800	\$71,730	\$106,530
Indiana	Hourly	\$22.08	\$29.96	\$41.59
	Yearly	\$45,920	\$62,330	\$86,510

Employment Trends: Appendix A

Website for more information: www.nursingworld.org

Respiratory Therapist

Description: Assess, treat, and care for patients with breathing disorders. Assume primary responsibility for all respiratory care modalities, including the supervision of respiratory therapy technicians. Initiate and conduct therapeutic procedures; maintain patient records; and select, assemble, check and operate equipment.

Tasks: Provide emergency care, including artificial respiration, external cardiac massage and assistance with cardiopulmonary resuscitation. Monitor patient's physiological responses to therapy, such as vital signs, arterial blood gases, and blood chemistry changes, and consult with physician if adverse reactions occur. Set up and operate devices such as mechanical ventilators, therapeutic gas administration apparatus, environmental control systems, and aerosol generators, following specified parameters of treatment. Enforce safety rules and ensure careful adherence to physicians' orders. Explain treatment procedures to patients to gain cooperation and allay fears. Relay blood analysis results to a physician. Maintain charts that contain patients' pertinent identification and therapy information. Work as part of a team of physicians, nurses, and other health care professionals to manage patient care by assisting with medical procedures and related duties. Inspect, clean, test and maintain respiratory therapy equipment to ensure equipment is functioning safely and efficiently, ordering repairs when necessary.

Skills:

WorkKeys Scores WorkKeys explanation on page ii

Applied Math	5	Workplace Docs	6	Graphic Literacy	5
Applied Technology		Workplace Observ.	3		

Personal Skills Required for this Career:

Active Listening, Critical Thinking, Monitoring, Speaking, Active Learning

Top Industries: [Health Care and Social Assistance](#)

Education:

- Most occupations in this zone require training in vocational schools, related on-the-job experience, or an associate's degree.
- Previous work-related skill, knowledge, or experience is required for these occupations.
- Employees in these occupations usually need one or two years of training involving both on-the-job experience and informal training with experienced workers.

Educational Institutions:

- Ivy Tech Community College

Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$21.03	\$28.98	\$40.15
	Yearly	\$43,750	\$60,280	\$83,520
Indiana	Hourly	\$19.97	\$26.63	\$35.32
	Yearly	\$41,530	\$55,390	\$73,470

Employment Trends: Appendix A

Website for further information: www.aarc.org

Sales Manager

Description: Plan, direct, or coordinate the actual distribution or movement of a product or service to the customer. Coordinate sales distribution by establishing sales territories, quotas, and goals and establish training programs for sales representatives. Analyze sales statistics gathered by staff to determine sales potential and inventory requirements and monitor the preferences of customers.

Tasks: Direct and coordinate activities involving sales of manufactured products, services, commodities, real estate or other subjects of sale. Resolve customer complaints regarding sales and service. Oversee regional and local sales managers and their staffs. Plan and direct staffing, training, and performance evaluations to develop and control sales and service programs. Determine price schedules and discount rates. Review operational records and reports to project sales and determine profitability. Monitor customer preferences to determine focus of sales efforts. Prepare budgets and approve budget expenditures. Confer or consult with department heads to plan advertising services and to secure information on equipment and customer specifications. Confer with potential customers regarding equipment needs and advise customers on types of equipment to purchase. Direct foreign sales and service outlets of an organization. Advise dealers and distributors on policies and operating procedures to ensure functional effectiveness of business. Direct, coordinate, and review activities in sales and service accounting and record-keeping, and in receiving and shipping operations.

Skills:

WorkKeys Scores WorkKeys explanation on page ii

Applied Math	4	Workplace Docs	5	Graphic Literacy	5
Applied Technology		Workplace Observ.	3		

Personal Skills Required for this Career:

Persuasion, Active Listening, Speaking, Coordination, Critical Thinking

Education:

- Most of these occupations require a four-year bachelor's degree, but some do not.
- A considerable amount of work-related skill, knowledge, or experience is needed for these occupations.
- Employees in these occupations usually need several years of work-related experience, on-the-job training, and/or vocational training.

Top Industries: [Retail Trade](#) and [Wholesale Trade](#)

Educational Institutions:

- Indiana University Kokomo
- Purdue University

Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$28.34	\$59.72	\$100.00+
	Yearly	\$58,940	\$124,220	\$208,000+
Indiana	Hourly	\$29.54	\$57.05	\$99.07
	Yearly	\$61,450	\$118,670	\$206,070

Employment Trends: Appendix A

Website for further information: <http://www.bls.gov/OOH/management/sales-managers.htm>

Sales Representative



Description: Sell goods for wholesalers or manufacturers where technical or scientific knowledge is required in such areas as biology, engineering, chemistry, and electronics, normally obtained from at least 2 years of post-secondary education.

Tasks: Negotiate prices and terms of sales and service agreements. Prepare sales contracts for orders obtained, and submit orders for processing. Contact new and existing customers to discuss their needs and to explain how these needs could be met by specific products and services. Answer customers' questions about products, prices, availability, product uses, and credit terms. Quote prices, credit terms and other bid specifications. Emphasize product features based on analyses of customers' needs, and on technical knowledge of product capabilities and limitations. Maintain customer records, using automated systems. Identify prospective customers by using business directories, following leads from existing clients, participating in organizations and clubs, and attending trade shows and conferences. Select the correct products or assist customers in making product selections, based on customers' needs, product specifications, and applicable regulations.

Skills:

WorkKeys Scores WorkKeys explanation on page ii

Applied Math	4	Workplace Docs	4	Graphic Literacy	4
Applied Technology		Workplace Observ.	2		

Personal Skills Required for this Career:

Persuasion, Speaking Active Listening, Negotiation, Social Perceptiveness

Education:

- Most of these occupations require a four-year bachelor's degree, but some do not.
- A considerable amount of work-related skill, knowledge, or experience is needed for these occupations.
- Employees in these occupations usually need several years of work-related experience, on-the-job training, and/or vocational training.

Top Industries: [Wholesale Trade](#) and [Manufacturing](#)

Educational Institutions:

- Indiana University Kokomo
- Purdue University

Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$19.21	\$38.31	\$75.31
	Yearly	\$39,960	\$79,680	\$156,630
Indiana	Hourly	\$20.34	\$40.67	\$82.61
	Yearly	\$42,300	\$84,600	\$171,840

Employment Trends: Appendix A

Website for further information: <http://www.bls.gov/ooh/sales/wholesale-and-manufacturing-sales-representatives.htm>

Secretaries and Administrative Assistants



Description: Perform routine clerical and administrative functions such as drafting correspondence, scheduling appointments, organizing and maintaining paper and electronic files, or providing information to callers.

Tasks: Answer telephones and give information to callers, take messages, or transfer calls to appropriate individuals. Greet visitors or callers and handle their inquiries or direct them to the appropriate persons according to their needs. Create, maintain, and enter information into databases. Use computers for various applications, such as database management or word processing. Operate office equipment, such as fax machines, copiers, or phone systems and arrange for repairs when equipment malfunctions. Set up and manage paper or electronic filing systems, recording information, updating paperwork, or maintaining documents, such as attendance records, correspondence, or other material. Operate electronic mail systems and coordinate the flow of information, internally or with other organizations. Schedule and confirm appointments for clients, customers, or supervisors. Maintain scheduling and event calendars. Compose, type, and distribute meeting notes, routine correspondence, or reports, such as presentations or expense, statistical, or monthly reports. Complete forms in accordance with company procedures.

Skills:

WorkKeys Scores WorkKeys explanation on page ii

Applied Math	3	Workplace Docs	4	Graphic Literacy	4
Applied Technology		Workplace Observ.	2		

Personal Skills Required for this Career:

Active Listening, Speaking, Reading Comprehension, Writing, Service Orientation

Top Industries: [Educational Services](#) and [Health Care and Social Assistance](#)

Education:

- These occupations usually require a high school diploma.
- Some previous work-related skill, knowledge, or experience is usually needed.
- Employees in these occupations need anywhere from a few months to one year of working with experienced employees.

Educational Institutions:

- Ivy Tech Community College

Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$11.09	\$17.61	\$26.93
	Yearly	\$23,060	\$36,630	\$56,010
Indiana	Hourly	\$9.91	\$15.34	\$22.59
	Yearly	\$20,610	\$31,910	\$47,000

Employment Trends: Appendix A

Website for further information: [International Association of Administrative Professionals](#)

Software Developers, Applications



Description: Develop, create, and modify general computer applications software or specialized utility programs. Analyze user needs and develop software solutions. Design software or customize software for client use with the aim of optimizing operational efficiency. May analyze and design databases within an application area, working individually or coordinating database development as part of a team. May supervise computer programmers.

Tasks: Modify existing software to correct errors, allow it to adapt to new hardware, or to improve its performance. Analyze user needs and software requirements to determine feasibility of design within time and cost constraints. Confer with systems analysts, engineers, programmers and others to design system and to obtain information on project limitations and capabilities, performance requirements and interfaces. Store, retrieve, and manipulate data for analysis of system capabilities and requirements. Design, develop and modify software systems, using scientific analysis and mathematical models to predict and measure outcome and consequences of design.

Skills:

WorkKeys Scores WorkKeys explanation on page ii

Applied Math	4	Workplace Docs	4	Graphic Literacy	4
Applied Technology		Workplace Observ.	4		

Personal Skills Required for this Career:

Programming, Systems Analysis, Systems Evaluation, Judgment and Decision Making, Complex Problem Solving

Top Industries: [Professional, Scientific, and Technical Services](#) and [Information](#)

Education:

- Most of these occupations require a four-year bachelor's degree, but some do not.
- A considerable amount of work-related skill, knowledge, or experience is needed for these occupations.
- Employees in these occupations usually need several years of work-related experience, on-the-job training, and/or vocational training.

Educational Institutions:

- Indiana University Kokomo
- Ivy Tech Community College
- Purdue University

Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$29.64	\$49.82	\$77.54
	Yearly	\$61,660	\$103,620	\$161,290
Indiana	Hourly	\$26.80	\$39.22	\$61.50
	Yearly	\$55,740	\$81,580	\$127,920

Employment Trends: Appendix A

Website for further information: [Occupational Outlook Handbook: Software developers](#)

Software Developers, Systems Software

Description: Research, design, develop, and test operating systems-level software, compilers, and network distribution software for medical, industrial, military, communications, aerospace, business, scientific, and general computing applications. Set operational specifications and formulate and analyze software requirements. May design embedded systems software. Apply principles and techniques of computer science, engineering, and mathematical analysis.

Tasks: Modify existing software to correct errors, to adapt it to new hardware, or to upgrade interfaces and improve performance. Develop or direct software system testing or validation procedures. Direct software programming and development of documentation. Consult with customers or other departments on project status, proposals, or technical issues, such as software system design or maintenance. Analyze information to determine, recommend, and plan installation of a new system or modification of an existing system.

Skills:

WorkKeys Scores WorkKeys explanation on page ii

Applied Math	4	Workplace Docs	5	Graphic Literacy	4
Applied Technology		Workplace Observ.	4		

Personal Skills Required for this Career:

Reading Comprehension, Active Listening, Critical Thinking, Complex Problem Solving, Speaking

Top Industries: [Professional, Scientific, and Technical Services](#) and [Manufacturing](#)

Education:

- Most of these occupations require a four-year bachelor's degree, but some do not.
- A considerable amount of work-related skill, knowledge, or experience is needed for these occupations.
- Employees in these occupations usually need several years of work-related experience, on-the-job training, and/or vocational training.

Educational Institutions:

- Indiana University Kokomo
- Ivy Tech Community College
- Purdue University

Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$32.09	\$52.89	\$80.27
	Yearly	\$66,740	\$110,000	\$166,960
Indiana	Hourly	\$25.49	\$41.66	\$63.01
	Yearly	\$53,020	\$86,650	\$131,070

Employment Trends: Appendix A

Website for further information: [Occupational Outlook Handbook: Software developers](#)

Team Assembler



Description: Work as part of a team having responsibility for assembling an entire product or component of a product. Team assemblers can perform all tasks conducted by the team in the assembly process and rotate through all or most of them rather than being assigned to a specific task on a permanent basis. May participate in making management decisions affecting the work. Includes team leaders who work as part of the team.

Tasks: Perform quality checks on products and parts. Package finished products and prepare them for shipment. Rotate through all the tasks required in a particular production process. Shovel, sweep, or otherwise clean work areas. Review work orders and blueprints to ensure work is performed according to specifications. Complete production reports to communicate team production level to management. Determine work assignments and procedures. Maintain production equipment and machinery. Provide assistance in the production of wiring assemblies. Supervise assemblers and train employees on job procedures.

Skills:

WorkKeys Scores WorkKeys explanation on page ii

Applied Math	3	Workplace Docs	3	Graphic Literacy	3
Applied Technology		Workplace Observ.	2		

Personal Skills Required for this Career:

Coordination, Monitoring, Quality Control Analysis, Active Listening, Critical Thinking

Top Industries: [Manufacturing](#) and [Administrative and Support Services](#)

Education:

- These occupations usually require a high school diploma.
- Some previous work-related skill, knowledge, or experience is usually needed.
- Employees in these occupations need anywhere from a few months to one year of working with experienced employees. A recognized apprenticeship program may be associated with these occupations.

Educational Institutions:

- Area Career Centers
- Ivy Tech Community College

Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$10.39	\$16.16	\$25.10
	Yearly	\$21,610	\$31,540	\$52,200
Indiana	Hourly	\$10.91	\$16.47	\$30.15
	Yearly	\$22,690	\$34,250	\$62,710

Employment Trends: Appendix A

Website for more information: www.bls.gov/ooh/production/assemblers-and-fabricators.htm

Tool and Die Makers

Description: Analyze specifications, lay out metal stock, set up and operate machine tools, and fit and assemble parts to make and repair dies, cutting tools, jigs, fixtures, gauges, and machinists' hand tools.

Tasks: Verify dimensions, alignments, and clearances of finished parts for conformance to specifications, using measuring instruments such as calipers, gauge blocks, micrometers, and dial indicators. Study blueprints, sketches, models, or specifications to plan sequences of operations for fabricating tools, dies, or assemblies. Set up and operate conventional or computer numerically controlled machine tools such as lathes, milling machines, and grinders to cut, bore, grind, or otherwise shape parts to prescribed dimensions and finishes. Visualize and compute dimensions, sizes, shapes, and tolerances of assemblies, based on specifications. Inspect finished dies for smoothness, contour conformity, and defects. Fit and assemble parts to make, repair, or modify dies, jigs, gauges, and tools, using machine tools and hand tools. File, grind, shim, and adjust different parts to properly fit them together. Lift, position, and secure machined parts on surface plates or worktables, using hoists, vises, v-blocks, or angle plates. Smooth and polish flat and contoured surfaces of parts or tools, using scrapers, abrasive stones, files, emery cloths, or power grinders. Design jigs, fixtures, and templates for use as work aids in the fabrication of parts or products. Measure, mark, and scribe metal or plastic stock to lay out machining, using instruments such as protractors, micrometers, scribes, and rulers. Set up and operate drill presses to drill and tap holes in parts for assembly. Cut, shape, and trim blanks or blocks to specified lengths or shapes, using power saws, power shears, rules, and hand tools. Develop and design new tools and dies, using computer-aided design software.

Skills:

WorkKeys Scores WorkKeys explanation on page ii

Applied Math	4	Workplace Docs	4	Graphic Literacy	4
Applied Technology	3	Workplace Observ.	3		

Personal Skills Required for this Career:

Operation and Control, Critical Thinking, Operation Monitoring Quality Control Analysis Active Listening

Top Industries: [Manufacturing](#)

Education:

- Most occupations in this zone require training in vocational schools, related on-the-job experience, or an associate's degree.
- Previous work-related skill, knowledge, or experience is required for these occupations.
- Employees in these occupations usually need one or two years of training involving both on-the-job experience and informal training with experienced workers.

Educational Institutions:

- Ivy Tech Community College

Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$15.70	\$25.36	\$36.97
	Yearly	\$32,660	\$52,750	\$76,900
Indiana	Hourly	\$16.23	\$25.27	\$35.91
	Yearly	\$33,760	\$52,560	\$74,700

Employment Trends: Appendix A

Website for further information: [Occupational Outlook Handbook: Machinists and tool and die makers](#)

Truck Driver, Heavy and Tractor-Trailer

Description: Drive tractor-trailer combination or a truck to transport and deliver goods, livestock, or materials in liquid, loose, or packaged form. May be required to unload truck. May require use of automated routing equipment. Requires commercial driver's license.

Tasks: Check vehicles to ensure that mechanical, safety, and emergency equipment is in good working order. Maneuver trucks into loading or unloading positions, following signals from loading crew and checking that vehicle and loading equipment are properly positioned. Collect delivery instructions from appropriate sources, verifying instructions and routes. Maintain logs of working hours or of vehicle service or repair status, following applicable state and federal regulations. Report vehicle defects, accidents, traffic violations, or damage to the vehicles. Secure cargo for transport, using ropes, blocks, chain, binders, or covers. Drive trucks to weigh stations before and after loading and along routes to document weights and to comply with state regulations. Drive trucks with capacities greater than 3 tons, including tractor-trailer combinations, to transport and deliver products, livestock, or other materials.

Skills:

WorkKeys Scores WorkKeys explanation on page ii

Applied Math	3	Workplace Docs	4	Graphic Literacy	4
Applied Technology	3	Workplace Observ.	2		

Personal Characteristics Required for this Career:

Operation and Control, Operation Monitoring, Time Management, Critical Thinking, Monitoring

Top Industries: [Transportation and Warehousing](#) and [Wholesale Trade](#)

Education:

- These occupations usually require a high school diploma.
- Some previous work-related skill, knowledge, or experience is usually needed.
- Employees in these occupations need anywhere from a few months to one year of working with experienced employees.

Educational Institutions:

- Ivy Tech Community College

Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$13.54	\$21.00	\$31.38
	Yearly	\$28,160	\$43,680	\$65,260
Indiana	Hourly	\$13.65	\$21.38	\$31.86
	Yearly	\$28,380	\$44,480	\$66,270

Employment Trends: Appendix A

Website for more information: www.trucking.org

Welder



Description: Use hand-welding or flame-cutting equipment to weld or join metal components or to fill holes, indentations, or seams of fabricated metal products.

Tasks: Operate safety equipment and use safe work habits. Weld components in flat, vertical, or overhead positions. Ignite torches or start power supplies and strike arcs by touching electrodes to metals being welded, completing electrical circuits. Clamp, hold, tack-weld, heat-bend, grind or bolt component parts to obtain required configurations and positions for welding. Detect faulty operation of equipment or defective materials and notify supervisors. Operate manual or semi-automatic welding equipment to fuse metal segments, using processes such as gas tungsten arc, gas metal arc, flux-cored arc, plasma arc, shielded metal arc, resistance welding, and submerged arc welding. Monitor the fitting, burning, and welding processes to avoid overheating of parts or warping, shrinking, distortion, or expansion of material. Examine work pieces for defects and measure work pieces with straightedges or templates to ensure conformance with specifications. Recognize, set up, and operate hand and power tools common to the welding trade, such as shielded metal arc and gas metal arc welding equipment. Lay out, position, align, and secure parts and assemblies prior to assembly, using straightedges, combination squares, calipers, and rulers.

Skills:

WorkKeys Scores WorkKeys explanation on page ii

Applied Math	3	Workplace Docs	3	Graphic Literacy	4
Applied Technology	3	Workplace Observ.	2		

Personal Skills Required for this Career:

Critical Thinking, Operation and Control, Monitoring, Reading Comprehension

Top Industries: [Manufacturing](#) and [Construction](#)

Education:

- Most occupations in this zone require training in vocational schools, related on-the-job experience, or an associate's degree.
- Previous work-related skill, knowledge, or experience is required for these occupations.
- Employees in these occupations usually need one or two years of training involving both on-the-job experience and informal training with experienced workers. A recognized apprenticeship program may be associated with these occupations.

Educational Institutions:

- Area Career Centers
- Ivy Tech Community College

Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$13.73	\$19.89	\$30.64
	Yearly	\$28,560	\$41,380	\$63,740
Indiana	Hourly	\$13.24	\$18.51	\$27.84
	Yearly	\$27,540	\$38,490	\$57,910

Employment Trends: Appendix A

Website for further information: www.aws.org

Appendix A – Occupational Trends for West Central Indiana

SOC	Description	2014 Jobs	2019 Jobs	2025 Jobs	% Change
13-2011	Accountants and Auditors	1,013	1,049	1,114	10.0%
11-3011	Administrative Services Managers	338	374	396	17.1%
49-3023	Automotive Service Technicians and Mechanics	1,130	1,209	1,251	10.7%
43-3031	Bookkeeping, Accounting, and Auditing Clerks	2,335	2,181	2,169	-7.1%
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	503	585	615	22.2%
47-2031	Carpenters	1,242	1,279	1,300	4.7%
51-4011	Computer-Controlled Machine Tool Operators, Metal and Plastic	707	627	647	-8.6%
11-3021	Computer and Information Systems Managers	222	262	286	28.7%
51-4012	Computer Numerically Controlled Machine Tool Programmers, Metal and Plastic	105	137	152	44.0%
15-1121	Computer Systems Analysts	394	383	403	2.5%
15-1151	Computer User Support Specialists	676	712	757	12.1%
11-9021	Construction Managers	340	406	421	23.7%
43-4051	Customer Service Representatives	2,280	2,418	2,437	6.9%
29-2021	Dental Hygienists	293	325	350	19.5%
11-9032	Education Administrators, Elementary and Secondary School	310	335	336	8.4%
11-9033	Education Administrators, Postsecondary	468	517	524	12.1%
17-2071	Electrical Engineers	291	322	340	16.9%
47-2111	Electricians	1,340	1,490	1,625	21.3%
29-2041	Emergency Medical Technicians and Paramedics	480	541	595	23.9%
11-3031	Financial Managers	346	393	440	27.1%
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	738	860	903	22.5%
43-1011	First-Line Supervisors of Office and Administrative Support Workers	1,699	1,733	1,721	1.3%
51-1011	First-Line Supervisors of Production and Operating Workers	2,026	2,447	2,601	28.4%
53-1048	First-line Supervisors of Transportation and Material Moving Workers	575	620	656	14.0%
11-1021	General and Operations Managers	2,682	2,869	3,040	13.4%
17-2112	Industrial Engineers	708	905	1,016	43.5%
49-9041	Industrial Machinery Mechanics	807	1,041	1,146	41.9%
11-3051	Industrial Production Managers	479	524	558	16.7%
53-7051	Industrial Truck and Tractor Operators	1,272	1,399	1,474	15.9%
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	1,352	1,567	1,510	11.7%
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	3,431	3,816	4,059	18.3%
29-2061	Licensed Practical and Licensed Vocational Nurses	989	915	963	-2.6%
51-4041	Machinists	1,346	1,527	1,698	26.1%
49-9071	Maintenance and Repair Workers, General	2,777	2,981	3,149	13.4%
49-9043	Maintenance Workers, Machinery	225	194	217	-3.6%
13-1111	Management Analysts	424	482	532	25.6%
17-2141	Mechanical Engineers	670	751	822	22.7%
11-9111	Medical and Health Services Managers	382	440	480	25.5%
31-9092	Medical Assistants	812	767	799	-1.6%
49-9044	Millwrights	304	316	328	8.0%
15-1142	Network and Computer Systems Administrators	380	370	377	-0.8%
31-1014	Nursing Assistants	2,262	2,237	2,402	6.2%
29-1122	Occupational Therapists	158	188	197	24.7%
29-1051	Pharmacists	458	452	436	-4.9%

29-2052	Pharmacy Technicians	509	524	522	2.4%
47-2152	Plumbers, Pipefitters, and Steamfitters	782	874	931	19.1%
33-3051	Police and Sheriff's Patrol Officers	1,050	1,061	1,093	4.1%
25-1099	Postsecondary Teachers	4,622	4,629	4,809	4.0%
25-2000	Preschool, Primary, Secondary, and Special Education Teachers	1,023	937	925	-9.5%
29-1141	Registered Nurses	3,619	4,084	4,506	24.5%
29-1126	Respiratory Therapists	228	274	315	38.1%
11-2022	Sales Managers	264	239	258	-2.1%
41-4011	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	355	332	355	0.0%
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	3,493	3,354	3,287	-5.9%
15-1132	Software Developers, Applications	316	414	487	53.8%
15-1133	Software Developers, Systems Software	159	173	194	22.1%
51-2098	Team Assemblers and Fabricators	6,086	7,310	7,619	25.2%
51-4111	Tool and Die Makers	781	668	638	-18.2%
53-3032	Truck Drivers	3,118	3,336	3,468	11.2%
51-4121	Welders, Cutters, Solderers, and Brazers	1,007	1,341	1,507	49.6%

Appendix B – University and College Program Information

INDIANA UNIVERSITY KOKOMO

ACADEMIC PROGRAMS AND DEGREES

Certificate Programs

- Coding Technology
- Contemporary Entrepreneurship
- Corrections Management
- Homeland Security/Emergency Management
- Labor Studies
- Public Safety

Associate's Degree

- Associate of Arts in General Studies
- Associate of Science in Applied Business Studies
- Associate of Science in Criminal Justice
- Associate of Science in Labor Studies
- Associate of Science in Radiography

Bachelor's Degree

- Bachelor of Arts in Biological and Physical Sciences
- Bachelor of Arts in Biology
- Bachelor of Science in Business (with the following concentrations)
 - Accounting
 - e-Business
 - Finance and Economics
 - Management and Human Resources
 - Marketing and Distribution
- Bachelor of Arts in Chemistry
- Bachelor of Arts in Communication Arts
- Bachelor of Science in Information Systems
- Bachelor of Science in Criminal Justice
- Bachelor of Science in Early Childhood Education
- Bachelor of Science in Education/Elementary
- Bachelor of Arts in Health and Aging
- Bachelor of Arts in History and Political Science
- Bachelor of Arts in Humanities
- Bachelor of Sciences in Informatics
- Bachelor of Science in Labor Studies
- Bachelor of Arts in Mathematics
- Bachelor of Science in Medical Imaging Technology
- Bachelor of Science in Pre-Occupational Therapy
- Bachelor of Arts in New Media Communication
- Bachelor of Science in Nursing
- Bachelor of Arts in Psychology
- Bachelor of Arts in Public Affairs
- Bachelor of Arts in Sociology

Post-Baccalaureate Certificates

- Accounting
- Computer Information Systems
- Mathematics
- Nursing Management
- Public Management

Master's Degree

- Business Administration
- Education
- Liberal Studies
- Nursing

Undergraduate preparation and advising for the following professional programs:

- Dentistry
- Law
- Medicine
- Optometry
- Pharmacy
- Veterinary Science

Contact Information

Indiana University Kokomo
2300 South Washington Street, Kokomo, IN 46904-9003
Phone: (765) 453-2000
Website: www.iuk.edu

INDIANA WESLEYAN UNIVERSITY

ACADEMIC PROGRAMS AND DEGREE

Associate of Science Degrees

- Accounting
- Business
- Computer Information Technology
- Criminal Justice

Bachelor of Science Degrees

- Business Administration
- Accounting
- Business Information Systems
- Criminal Justice
- Management
- Marketing

Master of Business Degrees

- Accounting
- Administration
- Applied Management
- Health Care

Contact Information

Indiana Wesleyan University
1916 E. Markland, Kokomo, IN 46901
Phone: (765) 868-7305
Website: <https://www.indwes.edu/kokomo/>

PURDUE UNIVERSITY – WEST LAFAYETTE

ACADEMIC PROGRAMS AND DEGREES

Bachelor Degrees

- Accounting
- Aeronautical Technology
- Agribusiness Management
- Agricultural and Biological Sciences
- Biomedical
- Building Construction Management Technology
- Chemistry
- Communication
- Computer Engineering Technology
- Computer and Information Technology
- Computer Sciences
- Criminal Justice
- Early Childhood Education and Exceptional Needs
- Early Intervention
- Education
- Electrical and Computer Engineering Technology
- Engineering
- Family and Consumer Sciences Education
- Human Resource Management
- Industrial Management
- Industrial Technology
- Information Technology
- Management
- Management Information Systems
- Manufacturing Management
- Marketing
- Mechanical Engineering Technology
- Medical Technology
- Movement and Sport Sciences
- Networking Engineering Technology
- Nursing
- Occupational Health Science
- Organizational Leadership and Supervision
- Pre-dentistry
- Pre-law
- Pre-medical Studies
- Pre-occupational Therapy
- Pre-pharmaceutical Sciences
- Pre-pharmacy
- Pre-physical Therapy
- Pre-physician's Assistant
- Radiological Health Science
- Special Education
- Youth, Adult, and Family Services

Contact Information

Purdue University
West Lafayette, IN 47907
Phone: (765) 494-4600
Website: www.purdue.edu

PURDUE POLYTECHNIC INSTITUTE

ACADEMIC PROGRAMS AND DEGREES

Associate of Science

- Computer Graphics Technology
- Computer Integrated Manufacturing Technology
- Computer Technology
- Electrical Engineering Technology
- Mechanical Engineering Technology
- Organizational Leadership and Supervision

Bachelor of Science

- Computer and Information Technology
- Electrical Engineering Technology
 - Option in Computer Engineering Technology
- Organizational Leadership and Supervision

Certificate Programs

- Industrial Maintenance Technician Certificate
- Microprocessor and Embedded Controller Certificate
- Organizational Leadership Certificate

Students completing an Associate's degree, for which a corresponding Bachelor's degree is not offered at this location, may complete the Bachelor's degree at another Purdue University campus.

Contact Information

Purdue Polytechnic Institute - Kokomo
2300 South Washington Street
P.O. Box 9003
Kokomo, IN 46904-9003
Phone: (765) 455-9339
Website: <https://polytechnic.purdue.edu/>

Purdue Polytechnic Institute - Lafayette
5500 State Rd. 38E, AD 2900
P.O. Box 5689
Lafayette, IN 47903
Phone: (765) 496-6886
Website: <https://polytechnic.purdue.edu/>

Appendix C – Community College Program Information

IVY TECH COMMUNITY COLLEGE ACADEMIC PROGRAMS AND DEGREES

All programs listed below, unless otherwise noted, are one of the following Associate degrees:

- Associate of Arts (transferable to Bachelor's degree)
- Associate of Science (transferable to Bachelor's degree)
- Associate of Applied Science

Business Division

- Accounting
- Business Administration
- Computer Information Systems
- Computer Information Technology
- Computer Network Concentration
- Computer Software Applications
- Management
- Office Administration

Health Sciences Division

- Dental Assistant
- Emergency Med Tech (EMT) – (Courses Only)
- Medical Assisting
- Nurse Aid (CNA) – (Courses Only)
- Nursing
- Paramedic Science
- Practical Nursing
- Radiological Technology
- Respiratory Care
- Surgical Technology

Public Services

- Criminal Justice
- Early Childhood Education
- Education
- Human Services
- Library Technical Assistance (Distance Education)
- Paralegal (Distance Education)
- Public Safety

Technology Division

- Automotive Technology
- Construction Technology
- Design Technology
- Heating, Ventilation and Air
- Manufacturing & Industrial Technology

General Education

- General Studies
- Liberal Arts
- Professional Communications

Arts and Design

- Visual Technologies

Career Development Certificates

- Accounting – Automated Accounting Clerk
- Accounting – General Bookkeeper
- Business Administrator – Operations Management
- Construction – Finish Carpenter
- Construction – Framing Carpenter
- Construction – Heating, Vent & Air Conditioning
- Early Childhood Education
- Human Services – Generalist/Mental Health I
- Human Services – Generalist/Mental Health II
- Human Services – Substance Abuse I
- Human Services – Substance Abuse II
- Manufacturing & Industrial Technology – Welding
- Office Administration – Medical Transcription
- Office Administration – Office Assistant
- Office Administration – Software Specialty

NOTE: Ivy Tech provides several degree options and specialty area options to students. Some programs are also available through distance education. Prospective students should seek advice from an Ivy Tech counselor for specifics.

Contact Information

Ivy Tech Community College – Crawfordsville
1825 Elmore St.
Crawfordsville, IN 47933
Phone: (765) 359-0570
Website: www.ivytech.edu/lafayette

Ivy Tech Community College - Lafayette
3101 S. Creasy Ln., PO Box 6299
Lafayette, IN 47903
Phone: (765) 269-5000
Website: www.ivytech.edu/lafayette

Ivy Tech Community College - Peru
425 West Main St.
Peru, IN 46970
Phone: (765) 472-3562
Website: www.ivytech.edu/kokomo

Ivy Tech Community College - Kokomo
1815 East Morgan St., PO Box 1373
Kokomo, IN 46901
Phone: (800) 459-0561
Website: www.ivytech.edu/kokomo

Ivy Tech Community College - Logansport
2815 East Market St.
Logansport, IN 46947
Phone: (866) 753-5102
Website: www.ivytech.edu/logansport

Appendix D – Career Center Program Information

CENTURY CAREER CENTER

ACADEMIC PROGRAMS

- Advanced Manufacturing
- Art, Media and Communication
- Automotive
- Building and Construction
- Business
- Computer Design
- Criminal Justice
- Early Childhood Education
- Engineering
- Health Science
- Information Technology
- Machining
- Transportation
- Welding Technology

Participating Schools: Caston, Lewis Cass, Logansport, Pioneer, Rochester, Winamac

Contact Information

Century Career Center
2500 Hopper St., Logansport, IN 46947
Phone: (574) 722-3811
Website: <http://ccc.lcsc.k12.in.us>

HEARTLAND CAREER CENTER

ACADEMIC PROGRAMS

- Auto Collision Repair Technology
- Automotive Service Technology
- Commercial Foods / Culinary Arts
- Computer Networking / Programming
- Construction Trades Academy
- Cosmetology
- Design / Graphic Technology
- Early Childhood Development
- Gas / Diesel Technology
- Interdisciplinary Cooperative Edu.
- Law Enforcement
- Machine Tool Technology
- Medical Careers Technology
- Robotics, Computers & Electronics Technology
- Technical Communications
- Welding Technology

Participating Schools: Manchester, North Miami, Northfield, Peru, Southwood, Wabash

Contact Information

Heartland Career Center
79 South 200 West, Wabash, IN 46992
Phone: (260) 563-7481
Website: www.hcc.k12.in.us/

INDIAN TRAILS CAREER COOPERATIVE

ACADEMIC PROGRAMS

- Agriculture
- Building Trades
- Commercial Art
- Computer Aided Drafting
- Computer Programming
- Early Childhood Education
- Education Professionals
- Fire Science

- Automotive Service
- Business Technology
- Commercial Photography
- Computer Networking
- Computer Repair
- Culinary Arts
- Family & Consumer Sciences
- First Responder
- Health Careers
- Homeland Security
- Horticulture
- ICE
- Interactive Media
- Law Enforcement
- Life Sciences
- Logistics
- Marketing
- Physical Therapy
- Project Lead the Way
 - Bio-Med
 - Engineering
- Printing/Graphic Arts
- Professional Career Internship
- Radio & TV
- Welding

Participating Schools: Carroll, Delphi, Frontier, Kankakee Valley, North Newton, North White, Rensselaer, South Newton, Tri-County, Twin Lakes, West Central

Contact Information

Indian Trails Career Cooperative Center
300 S. Third Street, Monticello, IN 47960

Please contact your local school to speak with the guidance department. Not all programs are offered at all schools.

Phone: (574) 583-7264 or 800-567-8399

KOKOMO AREA CAREER CENTER

ACADEMIC PROGRAMS

- 3D Animation
- Auto Service
- Building Trades
- CAN
- Collision Repair
- Commercial Photography
- Cosmetology
- Criminal Justice
- Culinary Arts
- Dental
- Design & Drafting
- Early Education
- Graphic Design
- Health Science
- Interactive Media
- Marketing
- Physical Therapy
- PLTW Engineering
- Radio/TV
- Web Design
- Welding

Participating Schools: Eastern, Kokomo Schools, Maconaquah, Northwestern, Taylor, Tipton, Tri-Central, Western

Contact Information

Kokomo Area Career Center
2415 South Berkley Rd.
Kokomo, IN 46902

Phone: Director at 765-362-2340

Website: www.kokomoschools.com/kacc

GREATER LAFAYETTE CAREER ACADEMY

ACADEMIC PROGRAMS

- Auto Service/Technology
- Communications & TV/Radio
- Construction & Architecture
- Cosmetology
- Culinary Arts
- Education
- Engineering & Manufacturing
- Health Science
- Information Technology
- Public Safety

Participating Schools: Harrison, Jefferson, McCutcheon, Oakland, West Lafayette

Contact Information

Greater Lafayette Career Academy

2201 S. 18th Street

Lafayette, IN 47909

Phone: (765) 807-8530

Fax: (765) 471-8468

Website: www.glcareeracademy.com

WABASH RIVER CAREER & TECHNICAL EDUCATION CENTER

ACADEMIC PROGRAMS

- Auto Services South
- Building Trades
- Computer Repair
- Cosmetology
- Early Childhood
- Graphic Imaging
- Health Careers South
- W.B.L
- Law Enforcement South
- Welding Technology South
- Precision Machine
- Arch Drafting
- Computer Technology
- Culinary Arts
- Health Science North
- Welding Technology North
- Law Enforcement North
- Auto Services North

Participating Schools: Attica, Covington, Fountain Central, Riverton Parke, Rockville, Seeger, S Vermillion, Turkey Run

Contact Information

Wabash River Career & Technical Education Center

615 E Strawberry Rd.

Montezuma, IN 47862

Mailing Address: PO Box 95, Hillsdale, IN 47854

Please contact your local school to speak with the guidance department. Not all programs are offered at all schools.

Phone: Director at 765-245-2870

Website: www.pveti.k12.in.us

WEST CENTRAL INDIANA CAREER & TECHNICAL EDUCATION COOPERATIVE

ACADEMIC PROGRAMS

- Computer Aided Design
- Dental Health Careers
- EMS / Fire Science
- Entrepreneurship
- Health Careers
- Heating / Air Conditioning
- Horticulture
- Law Enforcement
- Precision Machining
- Radio / TV
- Tri-County Auto
- Welding

Participating Schools: Crawfordsville, North Montgomery, Southmont, Western Boone **Contact Information**

West Central Indiana Career & Technical Education Cooperative

One Athenian Drive

Crawfordsville, IN 47933

Please contact your local school to speak with the guidance department. Not all programs are offered at all schools.

Phone: Director at 765-362-2340

WILDCAT CREEK CAREER COOPERATIVE

ACADEMIC PROGRAMS

- Advanced Manufacturing Technology
- Agriculture Education
- Auto Body Repair
- Automotive Services Technology
- Aviation Technology or Aviation Management
- Building Trades Technology
- Business Information Technology
- Business Marketing
- Business Technology
- Cosmetology
- Cosmetology
- Design Technology
- Education & Early Childhood Careers
- Engineering & Technology Education
- Family & Consumer Sciences
- Health Occupations
- Heating Ventilation and Air Conditioning
- Interdisciplinary Cooperative Education Experiences
- Law Enforcement
- Machine Tool Technology Program
- Project Lead the Way
 - Architecture Aerospace
 - Biomedical Engineering
 - Civil Engineering
 - Engineering Technology
 - Pre-Engineering Program
- Purdue University Programs
- Sustainable Energy
- Welding Technology

Participating Schools: Benton Central, Clinton Central, Clinton Prairie, Frankfort, Harrison, Jefferson, McCutcheon, Rossville, West Lafayette

Contact Information

Wildcat Creek Career Cooperative

21 Elston Road

Lafayette, IN 47905

Please contact your local school to speak with the guidance department. Not all programs are offered at all schools.

Phone: 765-474-2481

Website: www.tsc.k12.in.us

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