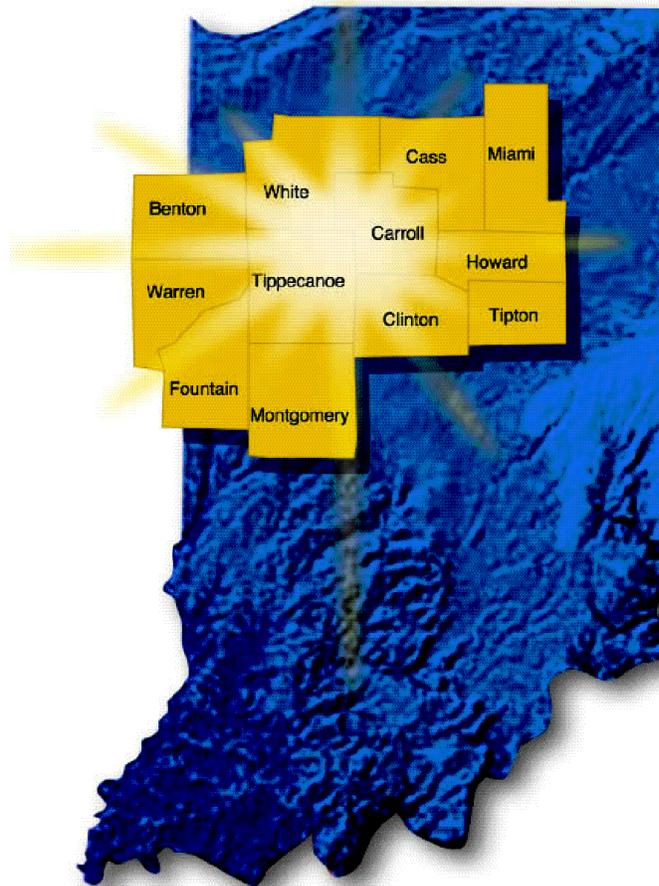


# Top 60 Critical Occupations in West Central Indiana

**2016 Edition**

Career Guide



Produced by  
**Region 4**  
**WORKFORCE**  
Board

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## Understanding this Career Guide

We are excited to present this updated 2016 Career Guide of the **Top 60 Critical Occupations in West Central Indiana, 2016 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 Characteristics Required for this Career** - This section gives descriptors of the characteristics necessary to perform the duties listed in the "Tasks" section.
5. **Education** - This section provides information on the specific high school diploma needed, suggested classes to take while in high school 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](http://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:

Reading for Information  
Locating Information

Applied Mathematics  
Applied Technology

Writing  
Teamwork

Listening  
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://online.O\\*NETcenter.org](http://online.O*NETcenter.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:

- Occupational Outlook Handbook 2010-11 Edition – [www.stats.bls.gov/oco](http://www.stats.bls.gov/oco)
- O\*NET – [www.online.O\\*NETcenter.org](http://www.online.O*NETcenter.org)
- WorkKeys – [www.ACT.org/workkeys](http://www.ACT.org/workkeys)
- Indiana Department of Workforce Development – [www.in.gov/dwd](http://www.in.gov/dwd)

# Indiana's High School Course and Credit Requirements

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2016

## 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. The entire document can be accessed online at [www.doe.state.in.us/core40](http://www.doe.state.in.us/core40) and at [www.learnmoreindiana.org](http://www.learnmoreindiana.org).

# INDIANA DIPLOMA INFORMATION

## Core 40 Diploma Criteria

English/Language Arts	<b>8 Credits</b>
	Credits must include literature, composition, and speech
Mathematics	<b>6 Credits</b>
	2 Credits: Algebra I* 2 Credits: Geometry* 2 Credits: Algebra II* (*or complete Integrated Math series I, II, and III for 6 credits) All students are required to take a math or physics course during their junior or senior year.
Science	<b>6 Credits</b>
	2 Credits: Biology I 2 Credits: Chemistry I or Physics I or Integrated Chemistry – Physics 2 Credits: any Core 40 Science course
Social Studies	<b>6 Credits</b>
	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	<b>5 Credits</b>
	World Languages                      Fine Arts                      Career/Technical
Physical Education	<b>2 Credits</b>
Health and Wellness	<b>1 Credit</b>
Electives*	<b>6 Credits</b> (Career Academic Sequence Recommended)
<b>40 Total State Credits Required</b>	
	Local schools may have additional graduation requirements that apply to all students, including those who earn the Core 40 Diploma

\*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:
  - Complete AP courses (4 credits) and corresponding AP exams
  - Complete IB (Higher Level) courses (4 credits) and corresponding IB exams
  - Earn a combined score of 1200 or higher combined SAT math and critical reading
  - Score a 26 or higher composite on the ACT
  - Complete dual high school/college credit courses from the Core Transfer Library (6 transferable college credits)
  - Complete a combination of AP course (2 credits) and corresponding AP exams and dual high school/college credit course(s) from the Core Transfer Library (3 transferable 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

\*\*\*SAT requirements will be modified with the addition of the writing section

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

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

- Complete all requirements for Core 40
- Complete a career-technical program (related sequence of 8-10 career-technical credits)
- Complete the following state recognized certification requirements:
- Earn a grade of “C” or above in courses that will count toward the diploma
- Have a grade point average of “B” or above

Must complete two of the options below – one of which must be a) or b):

- a) Score at or above the following levels on WorkKeys: Reading for information – Level 6; Applied Mathematics – Level 6; Locating Information – Level 5
- b) Complete dual high school/college credit courses in a technical area resulting in 6 college credits
- c) Complete a Professional career internship course or Cooperative Education course (2 credits)
- d) Complete an industry-based work experience as part of two-year technical education program (minimum 140 hours)
- e) Earn a state approved industry recognized certification

# INDIANA DIPLOMA INFORMATION

The completion of Core 40 becomes 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 career and 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 requirement for a general diploma and the career/academic sequence the student will pursue is determined.

## Indiana General High School Diploma Criteria

English/Language Arts	<b>8 Credits</b>
	Credits must include literature, composition, and speech
Mathematics	<b>4 Credits</b>
	2 Credits: Algebra I or Integrated Mathematics I 2 Credits: any Mathematics course
Science	<b>4 Credits</b>
	2 Credits: Biology I 2 Credits: any Science course (must come from either physical science or earth and space science)
Social Studies	<b>4 Credits</b>
	2 Credits: U.S. History 1 Credit: U.S. Government 1 Credit: any Social Studies course
Physical Education	<b>2 Credits</b>
Health and Wellness	<b>1 Credit</b>
Career Academic Sequence*	<b>6 Credits</b>
Flex Credit	<b>5 Credits</b>
	To earn the 5 Flex Credits a student must complete one of the following: <ul style="list-style-type: none"> <li>• Additional courses to extend the career-academic sequence.</li> <li>• Courses involving workplace learning, which may include the following courses:               <ul style="list-style-type: none"> <li>✓ Career exploration internship</li> <li>✓ Professional career internship</li> <li>✓ Business cooperative experiences</li> <li>✓ Cooperative family and consumer sciences</li> <li>✓ Industrial cooperative education</li> <li>✓ Interdisciplinary cooperative education</li> <li>✓ Marketing field experience</li> </ul> </li> <li>• High school/college dual credit courses</li> <li>• Additional courses in:               <ul style="list-style-type: none"> <li>✓ Language Arts</li> <li>✓ Social Studies</li> <li>✓ Mathematics</li> <li>✓ Science</li> <li>✓ World Languages</li> <li>✓ Fine Arts</li> </ul> </li> </ul>
Electives**	<b>6 Credits</b>

## 40 Total State Credits Required

\*Career Academic Sequence – Selecting electives in a deliberate manner to take full advantage of career exploration and preparation opportunities.  
 \*\* Specifies the number of electives required by the state. High school schedules provide time for many more electives during the high school years. Local schools may have additional graduation requirements that apply to all students.

## DEFINITIONS

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### PERSONAL CHARACTERISTICS:

**Achievement/Effort** – Job requires establishing and maintaining personally challenging achievement goals and exerting effort toward mastering tasks.

**Adaptability/Flexibility** – Job requires being open to change (positive or negative) and to considerable variety in the workplace.

**Analytical Thinking** – Job requires analyzing information and using logic to address work-related issues and problems.

**Attention to Detail** – Job requires being careful about detail and thorough in completing work tasks.

**Concern for Others** – Job requires being sensitive to others' needs and feelings and being understanding and helpful on the job.

**Cooperation** – Job requires being pleasant with others on the job and displaying a good-natured, cooperative attitude.

**Dependability** – Job requires being reliable, responsible, and dependable, and fulfilling obligations.

**Independence** – Job requires developing one's own ways of doing things, guiding oneself with little or no supervision, and depending on oneself to get things done.

**Integrity** – Job requires being honest and ethical.

**Leadership** – Job requires a willingness to lead, take charge, and offer opinions and direction.

**Persistence** – Job requires persistence in the face of obstacles.

**Stress Tolerance** – Job requires accepting criticism and dealing calmly and effectively with high stress situations.

**Self-Control** – Job requires maintaining composure, keeping emotions in check, controlling anger and avoiding aggressive behavior, even in very difficult situations.

**Social Orientation** – Job requires preferring to work with others rather than alone, and being personally connected with others on the job.

## KEY TERMS

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**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 "Personal Characteristics" from O\*NET.  
Definitions for "Key Terms" from Webster's Dictionary.



\*Indicates "Green Occupation"

# 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:** Prepare, examine, or analyze accounting records, financial statements, or other financial reports to assess accuracy, completeness, and conformance to reporting and procedural standards. Report to management regarding the finances of establishment. Establish tables of accounts and assign entries to proper accounts. Develop, implement, modify, and document recordkeeping and accounting systems, making use of current computer technology. Compute taxes owed and prepare tax returns, ensuring compliance with payment, reporting or other tax requirements. Maintain or examine the records of government agencies. Advise clients in areas such as compensation, employee health care benefits, the design of accounting or data processing systems, or long-range tax or estate plans. Develop, maintain, and analyze budgets, preparing periodic reports that compare budgeted costs to actual costs. Provide internal and external auditing services for businesses or individuals. Analyze business operations, trends, costs, revenues, financial commitments, and obligations, to project future revenues and expenses or to provide advice.

## Skills:

WorkKeys Scores      WorkKeys explanation on page ii

<b>Applied Math</b> 6	<b>Applied Technology</b>	<b>Listening</b>	<b>Locating Information</b> 5
<b>Observation</b> 4	<b>Reading Information</b> 5	<b>Teamwork</b> 3	<b>Writing</b> 3

## Personal Characteristics Required for this Career:

Attention to Detail, Integrity, Dependability, Analytical Thinking, Achievement/Effort, Cooperation, Initiative, Independence, Persistence, Stress Tolerance, Self-Control, Adaptability/Flexibility, and Leadership

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

## Education:

- High School: Core 40 or Core 40 Academic Honors Diploma
- Suggested High School Classes: Mathematics, Business, Computers and Accounting
- Postsecondary: Bachelor's Degree in accounting or a related field. Some organizations require a Certified Public Accountant (CPA) or a Master's Degree

## Educational Institutions:

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

## Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$19.64	\$31.70	\$55.75
	Yearly	\$40,850	\$65,940	\$115,950
Indiana	Hourly	\$17.77	\$28.94	\$47.89
	Yearly	\$36,960	\$60,190	\$99,620

**Employment Trends:** Appendix A

**Website for further information:** [www.aicpa.org](http://www.aicpa.org)

# Architectural and Engineering Managers

**Description:** Plan, direct, or coordinate activities in such fields as architecture and engineering or research and development in these fields.

**Tasks:** Manage the coordination and overall integration of technical activities in architecture or engineering projects. Direct, review, or approve project design changes. Confer with management, production, or marketing staff to discuss project specifications or procedures. Present and explain proposals, reports, or findings to clients. Consult or negotiate with clients to prepare project specifications. Prepare budgets, bids, or contracts. Assess project feasibility by analyzing technology, resource needs, and market demand. Direct recruitment, placement, and evaluation of architecture or engineering project staff. Review, recommend, or approve contracts or cost estimates. Develop or implement policies, standards, or procedures for engineering and technical work. Plan or direct the installation, testing, operation, maintenance, or repair of facilities or equipment. Perform administrative functions, such as reviewing or writing reports, approving expenditures, enforcing rules, or purchasing of materials or services. Establish scientific or technical goals within broad outlines provided by top management. Evaluate environmental regulations or social pressures related to environmental issues to inform strategic or operational decision-making. Solicit project support by conferring with officials or providing information to the public. Develop or implement programs to improve sustainability or reduce the environmental impacts of engineering or architecture activities or operations. Evaluate the environmental impacts of engineering, architecture, or research and development activities.

## Skills:

WorkKeys Scores

WorkKeys explanation on page ii

<b>Applied Math</b> 7	<b>Applied Technology</b>	<b>Listening</b> 4	<b>Locating Information</b> 5
<b>Observation</b> 5	<b>Reading Information</b> 7	<b>Teamwork</b> 4	<b>Writing</b>

## Personal Characteristics Required for this Career:

Attention to Detail, Integrity, Adaptability/Flexibility, Analytical Thinking, Dependability, Stress Tolerance, Cooperation, Initiative, Leadership, Persistence, Independence, Self-Control, Achievement/Effort

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

## Education:

- High School: General Diploma, Core 40 Diploma
- Suggested High School Classes: Chemistry, Computer Science
- Postsecondary: Bachelor's degree, Master's degree, Post-baccalaureate certificate

## Educational Institutions:

- Purdue University

## Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$10.81	\$17.51	\$27.15
	Yearly	\$22,480	\$36,430	\$56,470
Indiana	Hourly	\$10.02	\$16.43	\$23.79
	Yearly	\$20,850	\$34,170	\$49,470

**Employment Trends:** Appendix A

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

# Assemblers and Fabricators

**Description:** Construct, assemble, or rebuild machines, such as engines, turbines, and similar equipment.

**Tasks:** Read and interpret assembly blueprints or specifications manuals and plan assembly or building operations. Inspect, operate, and test completed products to verify functioning, machine capabilities, or conformance to customer specifications. Position or align components for assembly, manually or using hoists. Set and verify parts clearances. Verify conformance of parts to stock lists or blueprints, using measuring instruments, such as calipers, gauges, or micrometers. Fasten or install piping, fixtures, or wiring and electrical components to form assemblies or subassemblies, using hand tools, rivet guns, or welding equipment. Remove rough spots and smooth surfaces to fit, trim, or clean parts, using hand tools or power tools. Lay out and drill, ream, tap, or cut parts for assembly. Rework, repair, or replace damaged parts or assemblies. Assemble systems of gears by aligning and meshing gears in gearboxes. Set up and operate metalworking machines, such as milling or grinding machines, to shape or fabricate parts. Maintain and lubricate parts or components.

## Skills:

WorkKeys Scores      WorkKeys explanation on page ii

<b>Applied Math</b> 3	<b>Applied Technology</b>	<b>Listening</b>	<b>Locating Information</b> 3
<b>Observation</b> 3	<b>Reading Information</b> 3	<b>Teamwork</b> 3	<b>Writing</b>

## Personal Characteristics Required for this Career:

Attention to Detail, Cooperation, Integrity, Dependability, Independence, Initiative, Innovation, Analytical Thinking, Concern for Others, Persistence, Self-Control, Adaptability/Flexibility, Stress Tolerance

**Top Industries:** [Manufacturing](#)

## Education:

- High School: General Diploma, Core 40 Diploma
- Suggested High School Classes: General studies
- Postsecondary: Moderate-term on-the-job training

## Educational Institutions:

- Ivy Tech Community College

## Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$8.62	\$12.68	\$20.79
	Yearly	\$17,940	\$26,380	\$43,250
Indiana	Hourly	\$8.31	\$13.90	\$21.48
	Yearly	\$17,280	\$28,920	\$44,680

**Employment Trends:** Appendix A

**Website for further information:** <http://www.bls.gov/ooh/production/assemblers-and-fabricators.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. Replace and adjust headlights. Overhaul or replace carburetors, blowers, generators, distributors, starters, and pumps. Repair radiator leaks. Align vehicles' front ends. Rebuild parts, such as crankshafts and cylinder blocks. Repair damaged automobile bodies.

## Skills:

WorkKeys Scores      WorkKeys explanation on page ii

<b>Applied Math 3</b>	<b>Applied Technology</b>	<b>Listening</b>	<b>Locating Information 4</b>
<b>Observation</b>	<b>Reading Information 4</b>	<b>Teamwork</b>	<b>Writing</b>

## Personal Characteristics Required for this Career:

Attention to Detail, Dependability, Integrity, Independence, Analytical Thinking, Initiative, Cooperation, Persistence, Stress Tolerance, Achievement/Effort, Self-Control, Innovation, Leadership

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

## Education:

- High School: General Diploma, Core 40 Diploma
- Suggested High School Classes: Mathematics and Science
- Postsecondary: Moderate-term on-the-job training, Post-secondary certificate

## Educational Institutions:

- Career Centers, Ivy Tech Community College

## Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$10.00	\$17.84	\$29.94
	Yearly	\$20,800	\$37,120	\$62,280
Indiana	Hourly	\$10.76	\$17.99	\$30.27
	Yearly	\$22,380	\$37,410	\$62,970

**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. Classify, record, and summarize numerical and financial data to compile and keep financial records, using journals and ledgers or computers. Debit, credit, and total accounts on computer spreadsheets and databases, using specialized accounting software. Operate 10-key calculators, typewriters, and copy machines to perform calculations and produce documents. Receive, record, and bank cash, checks, and vouchers. Comply with federal, state, and company policies, procedures, and regulations. Compile statistical, financial, accounting or auditing reports and tables pertaining to such matters as cash receipts, expenditures, accounts payable and receivable, and profits and losses. Code documents according to company procedures. Reconcile or note and report discrepancies found in records.

## Skills:

WorkKeys Scores      WorkKeys explanation on page ii

<b>Applied Math</b> 4	<b>Applied Technology</b>	<b>Listening</b> 3	<b>Locating Information</b> 4
<b>Observation</b> 4	<b>Reading Information</b> 4	<b>Teamwork</b> 3	<b>Writing</b> 3

## Personal Characteristics Required for this Career:

Integrity, Attention to Detail, Dependability, Independence, Cooperation, Analytical Thinking, Initiative, Adaptability/Flexibility, Self-Control, Persistence, Stress Tolerance, Concern for Others, Achievement/Effort

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

## Education:

- High School: General Diploma, Core 40 Diploma
- Suggested High School Classes: Mathematics, Business, Computers and Accounting
- Postsecondary: Moderate-term on-the-job training

## Educational Institutions:

- Ivy Tech Community College

## Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$10.81	\$17.51	\$27.15
	Yearly	\$22,480	\$36,430	\$56,470
Indiana	Hourly	\$10.02	\$16.43	\$23.79
	Yearly	\$20,850	\$34,170	\$49,470

**Employment Trends:** Appendix A

**Website for further information:** [www.aicpa.org](http://www.aicpa.org)

**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. Verify trueness of structure, using plumb bob and level. Select and order lumber or other required materials. Arrange for subcontractors to deal with special areas, such as heating or electrical wiring work. Maintain records, document actions, and present written progress reports. Build or repair cabinets, doors, frameworks, floors, or other wooden fixtures used in buildings, using woodworking machines, carpenter's hand tools, or power tools. Erect scaffolding or ladders for assembling structures above ground level. Inspect ceiling or floor tile, wall coverings, siding, glass, or woodwork to detect broken or damaged structures. Assemble and fasten materials to make frameworks or props, using hand tools and wood screws, nails, dowel pins, or glue. Remove damaged or defective parts or sections of structures and repair or replace, using hand tools. Finish surfaces of woodwork or wallboard in houses or buildings, using paint, hand tools, or paneling. Cover subfloors with building paper to keep out moisture and lay hardwood, parquet, or wood-strip-block floors by nailing floors to subfloor or cementing them to mastic or asphalt base. Perform minor plumbing, welding, or concrete mixing work. Prepare cost estimates for clients or employers. Construct forms or chutes for pouring concrete. Work with or remove hazardous material.

**Skills:**

WorkKeys Scores	WorkKeys explanation on page ii				
<b>Applied Math</b> 3	<b>Applied Technology</b> 4	<b>Listening</b> 2	<b>Locating Information</b> 3		
<b>Observation</b> 3	<b>Reading Information</b> 3	<b>Teamwork</b> 3	<b>Writing</b> 2		

**Personal Characteristics:**

Attention to Detail, Dependability, Integrity, Cooperation, Self-Control, Independence, Adaptability/Flexibility, Concern for Others, Leadership, Initiative, Stress Tolerance, Analytical Thinking

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

**Education:**

- High School: Core 40 Diploma
- Suggested High School Classes: Carpentry
- Postsecondary: Long-term on-the-job training, instruction in Carpentry

**Educational Institutions:**

- Ivy Tech Community College

**Salaries/Wage:**

Location	Pay Period	Low	Median	High
United States	Hourly	\$12.33	\$19.63	\$35.94
	Yearly	\$25,640	\$40,820	\$74,750
Indiana	Hourly	\$11.98	\$18.33	\$29.99
	Yearly	\$24,920	\$38,130	\$62,380

**Employment Trends:** Appendix A

**Website for further information:** [www.agc.org](http://www.agc.org)

# Computer Network and Computer Systems Administrators

**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. May assist in network modeling, analysis, planning, and coordination between network and data communications hardware and software. May supervise computer user support specialists and computer network support specialists. May administer network security measures.

**Tasks:** Maintain and administer computer networks and related computing environments including computer hardware, systems software, applications software, and all configurations. Diagnose, troubleshoot, and resolve hardware, software, or other network and system problems, and replace defective components when necessary. Plan, coordinate, and implement network security measures to protect data, software, and hardware. Operate master consoles to monitor the performance of computer systems and networks, and to coordinate computer network access and use. Load computer tapes and disks, and install software and printer paper or forms. Design, configure, and test computer hardware, networking software and operating system software. Research new technologies by attending seminars, reading trade articles, or taking classes, and implement or recommend the implementation of new technologies. Recommend changes to improve systems and network configurations, and determine hardware or software requirements related to such changes. Coordinate with vendors and with company personnel to facilitate purchases. Perform routine network startup and shutdown procedures, and maintain control records.

## Skills:

WorkKeys Scores      WorkKeys explanation on page ii

<b>Applied Math</b>	<b>5</b>	<b>Applied Technology</b>	<b>5</b>	<b>Listening</b>	<b>4</b>	<b>Locating Information</b>	<b>4</b>
<b>Observation</b>	<b>5</b>	<b>Reading Information</b>	<b>5</b>	<b>Teamwork</b>	<b>4</b>	<b>Writing</b>	<b>3</b>

## Personal Characteristics Required for this Career:

Attention to Detail, Adaptability/Flexibility, Analytical Thinking, Dependability, Cooperation, Independence, Integrity, Persistence, and Concern for Others

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

## Education:

- High School: Core 40 Diploma
- Suggested High School Classes: Mathematics, Science and Computer Science
- Postsecondary: Associate degree in Computer Science

## 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	\$22.22	\$36.44	\$57.69
	Yearly	\$46,220	\$75,790	\$120,000
Indiana	Hourly	\$19.68	\$30.30	\$47.27
	Yearly	\$40,930	\$63,030	\$98,330

**Employment Trends:** Appendix A

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

# Computer 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. Consult with engineering staff to evaluate interface between hardware and software, develop specifications and performance requirements, or resolve customer problems. Design or develop software systems, using scientific analysis and mathematical models to predict and measure outcome and consequences of design. Prepare reports or correspondence concerning project specifications, activities, or status. Confer with data processing or project managers to obtain information on limitations or capabilities for data processing projects. Store, retrieve, and manipulate data for analysis of system capabilities and requirements. Coordinate installation of software system. Monitor functioning of equipment to ensure system operates in conformance with specifications. Supervise and assign work to programmers, designers, technologists, technicians, or other engineering or scientific personnel.

## Skills:

WorkKeys Scores      WorkKeys explanation on page ii

<b>Applied Math</b> 7	<b>Applied Technology</b>	<b>Listening</b>	<b>Locating Information</b> 5
<b>Observation</b>	<b>Reading Information</b> 5	<b>Teamwork</b>	<b>Writing</b>

## Personal Characteristics Required for this Career:

Attention to Detail, Analytical Thinking, Initiative, Dependability, Adaptability/Flexibility, Innovation, Independence, Persistence, Integrity, Stress Tolerance, Achievement/Effort, Cooperation, Leadership

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

## Education:

- High School: Core 40 Diploma
- Suggested High School Classes: Mathematics and Computer Science
- Postsecondary: Bachelor's degree in Computer Science

## Educational Institutions:

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

## Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$30.41	\$49.46	\$74.42
	Yearly	\$63,250	\$102,880	\$154,800
Indiana	Hourly	\$24.59	\$39.83	\$58.54
	Yearly	\$51,160	\$82,840	\$121,750

**Employment Trends:** Appendix A

**Website for further information:** <http://www.bls.gov/ooh/computer-and-information-technology/software-developers.htm>

# 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:** Expand or modify system to serve new purposes or improve workflow. Test, maintain, and monitor computer programs and systems, including coordinating the installation of computer programs and systems. Develop, document and revise system design procedures, test procedures, and quality standards. Provide staff and users with assistance solving computer related problems, such as malfunctions and program problems. Review and analyze computer printouts and performance indicators to locate code problems, and correct errors by correcting codes. 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. Read manuals, periodicals, and technical reports to learn how to develop programs that meet staff and user requirements. Coordinate and link the computer systems within an organization to increase compatibility and so information can be shared. Determine computer software or hardware needed to set up or alter system.

## Skills:

WorkKeys Scores      WorkKeys explanation on page ii

<b>Applied Math</b> 5	<b>Applied Technology</b>	<b>Listening</b> 3	<b>Locating Information</b> 4
<b>Observation</b> 4	<b>Reading Information</b> 4	<b>Teamwork</b> 4	<b>Writing</b> 3

## Personal Characteristics Required for this Career:

Attention to Detail, Analytical Thinking, Dependability, Integrity, Adaptability/Flexibility, Innovation, Cooperation, Initiative, Stress Tolerance, Persistence

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

## Education:

- High School: Core 40 or Core 40 Academic Honors Diploma
- Suggested High School Classes: Computers, Mathematics, and English Language
- Postsecondary: Bachelor's Degree in Computer Science, Information Science, or Management Information Systems (MIS) - Some businesses require a Master's degree in Business Administration

## 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	\$10.81	\$17.51	\$27.15
	Yearly	\$22,480	\$36,430	\$56,470
Indiana	Hourly	\$10.02	\$16.43	\$23.79
	Yearly	\$20,850	\$34,170	\$49,470

**Employment Trends:** Appendix A

**Website for further information:** <http://www.bls.gov/ooh/computer-and-information-technology/computer-systems-analysts.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. Set up and operate computer-controlled machines or robots to perform one or more machine functions on metal or plastic workpieces. Review program specifications or blueprints to determine and set machine operations and sequencing, finished workpiece dimensions, or numerical control sequences. Enter commands or load control media, such as tapes, cards, or disks, into machine controllers to retrieve programmed instructions. Modify cutting programs to account for problems encountered during operation and save modified programs. Calculate machine speed and feed ratios and the size and position of cuts. Adjust machine feed and speed, change cutting tools, or adjust machine controls when automatic programming is faulty or if machines malfunction. Confer with supervisors or programmers to resolve machine malfunctions or production errors or to obtain approval to continue production. Implement changes to machine programs and enter new specifications, using computers. Input initial part dimensions into machine control panels. Write simple programs for computer-controlled machine tools.

## Skills:

WorkKeys Scores      WorkKeys explanation on page ii

<b>Applied Math</b>	<b>3</b>	<b>Applied Technology</b>	<b>3</b>	<b>Listening</b>	<b>2</b>	<b>Locating Information</b>	<b>4</b>
<b>Observation</b>	<b>4</b>	<b>Reading Information</b>	<b>3</b>	<b>Teamwork</b>	<b>3</b>	<b>Writing</b>	<b>2</b>

## Personal Characteristics Required for this Career:

Attention to Detail, Achievement/Effort, Analytical Thinking, Cooperation, Persistence, Self-Control, Initiative, Adaptability/Flexibility, Stress Tolerance, Independence, Dependability, Innovation, and Integrity

**Top Industries:** [Manufacturing](#)

## Education:

- High School: General Diploma or Core 40 Diploma
- Suggested High School Classes: Business and English Language
- Postsecondary: Moderate-term on-the-job training

## Educational Institutions:

- Ivy Tech Community College

## Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$11.38	\$17.52	\$26.63
	Yearly	\$23,670	\$36,440	\$55,400
Indiana	Hourly	\$10.77	\$15.06	\$22.09
	Yearly	\$22,400	\$31,320	\$45,940

**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		
<b>Applied Math 5</b>	<b>Applied Technology</b>	<b>Listening</b>	<b>Locating Information 6</b>
<b>Observation 6</b>	<b>Reading Information 6</b>	<b>Teamwork</b>	<b>Writing</b>

**Personal Characteristics Required for this Career:**

Integrity, Leadership, Initiative, Attention to Detail, Dependability, Cooperation, Persistence, Self-Control, Stress Tolerance, Adaptability/Flexibility, Analytical Thinking, Achievement/Effort, Concern for Others

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

**Education:**

- High School: Core 40 Diploma
- Suggested High School Classes: Math, Science, Business and English Language
- Postsecondary: Bachelor's degree

**Educational Institutions:**

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

**Salaries/Wage:**

Location	Pay Period	Low	Median	High
United States	Hourly	\$24.51	\$41.17	\$72.23
	Yearly	\$50,990	\$85,630	\$150,250
Indiana	Hourly	\$21.31	\$36.74	\$59.56
	Yearly	\$44,330	\$76,410	\$123,890

**Employment Trends:** Appendix A

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

# Counselors - Educational, Guidance, School & Vocational

**Description:** Counsel individuals and provide group educational and vocational guidance services.

**Tasks:** Counsel individuals to help them understand and overcome personal, social, or behavioral problems affecting their educational or vocational situations. Provide crisis intervention to students when difficult situations occur at schools. Confer with parents or guardians, teachers, administrators, and other professionals to discuss children's progress, resolve behavioral, academic, and other problems, and to determine priorities for students and their resource needs. Maintain accurate and complete student records as required by laws, district policies, and administrative regulations. Prepare students for later educational experiences by encouraging them to explore learning opportunities and to persevere with challenging tasks. Evaluate students' or individuals' abilities, interests, and personality characteristics using tests, records, interviews, or professional sources. Identify cases of domestic abuse or other family problems and encourage students or parents to seek additional assistance from mental health professionals. Counsel students regarding educational issues, such as course and program selection, class scheduling and registration, school adjustment, truancy, study habits, and career planning. Provide special services such as alcohol and drug prevention programs and classes that teach students to handle conflicts without resorting to violence. Conduct follow-up interviews with counselees to determine if their needs have been met.

## Skills:

WorkKeys Scores

WorkKeys explanation on page ii

<b>Applied Math</b> 4	<b>Applied Technology</b>	<b>Listening</b> 4	<b>Locating Information</b> 4
<b>Observation</b> 4	<b>Reading Information</b> 4	<b>Teamwork</b> 4	<b>Writing</b> 3

## Personal Characteristics Required for this Career:

Concern for Others, Integrity, Cooperation, Self-Control, Adaptability/Flexibility, Dependability, Initiative, Social Orientation, Stress Tolerance, Leadership, Attention to Detail, Persistence, Independence

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

## Education:

- High School: Core 40 Diploma
- Suggested High School Classes: Psychology, English Language, Sociology
- Postsecondary: Master's degree

## Educational Institutions:

- Indiana University Kokomo
- Purdue University

## Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$15.37	\$25.66	\$41.64
	Yearly	\$31,960	\$53,370	\$86,610
Indiana	Hourly	\$15.87	\$23.60	\$35.74
	Yearly	\$33,010	\$49,080	\$74,340

**Employment Trends:** Appendix A

**Website for further information:** <http://www.bls.gov/oes/current/oes211012.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. Determine charges for services requested, collect deposits or payments, or arrange for billing. Refer unresolved customer grievances to designated departments for further investigation. Review insurance policy terms to determine whether a particular loss is covered by insurance. Contact customers to respond to inquiries or to notify them of claim investigation results or any planned adjustments. 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

<b>Applied Math</b>	<b>4</b>	<b>Applied Technology</b>	<b>Listening</b>	<b>3</b>	<b>Locating Information</b>	<b>4</b>
<b>Observation</b>	<b>4</b>	<b>Reading Information</b>	<b>Teamwork</b>	<b>3</b>	<b>Writing</b>	<b>3</b>

## Personal Characteristics Required for this Career:

Attention to Detail, Cooperation, Integrity, Dependability, Concern for Others, Self-Control, Stress Tolerance, Adaptability/Flexibility, Independence, Social Orientation, Achievement/Effort, Analytical Thinking

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

## Education:

- High School: Core 40 Diploma
- Suggested High School Classes: English Language and Office Practices
- Postsecondary: Associate degree and Moderate-term on-the-job training

## Educational Institutions:

- Ivy Tech Community College

## Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$9.55	\$15.00	\$24.82
	Yearly	\$19,860	\$31,200	\$51,630
Indiana	Hourly	\$9.73	\$14.90	\$25.43
	Yearly	\$20,230	\$30,990	\$52,880

**Employment Trends:** Appendix A

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

# Cutting, Punching, and Press Machine Operators, and Tenders

**Description:** Set up, operate, or tend machines to saw, cut, shear, slit, punch, crimp, notch, bend, or straighten metal or plastic material.

**Tasks:** Examine completed workpieces for defects, such as chipped edges or marred surfaces and sort defective pieces according to types of flaws. Measure completed workpieces to verify conformance to specifications, using micrometers, gauges, calipers, templates, or rulers. Set stops on machine beds, change dies, and adjust components, such as rams or power presses, when making multiple or successive passes. Start machines, monitor their operations, and record operational data. Set up, operate, or tend machines to saw, cut, shear, slit, punch, crimp, notch, bend, or straighten metal or plastic material. Test and adjust machine speeds or actions, according to product specifications, using gauges and hand tools. Install, align, and lock specified punches, dies, cutting blades, or other fixtures in rams or beds of machines, using gauges, templates, feelers, shims, and hand tools. Read work orders or production schedules to determine specifications, such as materials to be used, locations of cutting lines, or dimensions and tolerances. Position guides, stops, holding blocks, or other fixtures to secure and direct workpieces, using hand tools and measuring devices. Position, align, and secure workpieces against fixtures or stops on machine beds or on dies. Load workpieces, plastic material, or chemical solutions into machines. Plan sequences of operations, applying knowledge of physical properties of workpiece materials.

## Skills:

WorkKeys Scores      WorkKeys explanation on page ii

<b>Applied Math</b>	<b>3</b>	<b>Applied Technology</b>	<b>3</b>	<b>Listening</b>	<b>4</b>	<b>Locating Information</b>	<b>4</b>
<b>Observation</b>	<b>4</b>	<b>Reading Information</b>	<b>3</b>	<b>Teamwork</b>	<b>4</b>	<b>Writing</b>	<b>3</b>

## Personal Characteristics Required for this Career:

Attention to Detail, Dependability, Independence, Initiative, Integrity, Self-Control, Innovation, Adaptability/Flexibility, Cooperation, Persistence, Achievement/Effort, Concern for Others

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

## Education:

- High School: General Diploma or Core 40 Diploma
- Suggested High School Classes: General studies
- Postsecondary: Moderate-term on-the-job training

## Educational Institutions:

- Heartland Career Center
- Indian Trails Career Cooperative
- Kokomo Area Career Center
- West Central Indiana Career & Technical Education Cooperative
- Wildcat Creek Career Cooperative

## Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$9.83	\$14.75	\$22.66
	Yearly	\$20,440	\$30,680	\$47,130
Indiana	Hourly	\$9.42	\$13.52	\$20.43
	Yearly	\$19,590	\$28,120	\$42,500

**Employment Trends:** Appendix A

**Website for further information:** <http://www.bls.gov/OOH/production/metal-and-plastic-machine-workers.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

<b>Applied Math 3</b>	<b>Applied Technology</b>	<b>Listening</b>	<b>Locating Information 4</b>
<b>Observation</b>	<b>Reading Information 5</b>	<b>Teamwork</b>	<b>Writing</b>

## Personal Characteristics Required for this Career:

Dependability, Attention to Detail, Concern for Others, Integrity, Cooperation, Self-Control, Social Orientation, Achievement/Effort, Adaptability/Flexibility, Independence, Initiative, Stress Tolerance

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

## Education:

- High School: Core 40 Diploma
- Suggested High School Classes: Mathematics, Chemistry, Biology, and English Language
- Postsecondary: Certificate program or Associate's degree

## Educational Institutions:

- Ivy Tech Community College

## Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$23.65	\$34.38	\$46.82
	Yearly	\$49,190	\$71,520	\$97,390
Indiana	Hourly	\$22.40	\$32.28	\$38.46
	Yearly	\$46,590	\$67,130	\$80,000

**Employment Trends:** Appendix A

**Website for further information:** [www.adha.org](http://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:** Enforce discipline and attendance rules. Confer with parents and staff to discuss educational activities, policies, and student behavioral or learning problems. Observe teaching methods and examine learning materials to evaluate and standardize curricula and teaching techniques, and to determine areas where improvement is needed. Collaborate with teachers to develop and maintain curriculum standards, develop mission statements, and set performance goals and objectives. Recruit, hire, train, and evaluate primary and supplemental staff. Evaluate curricula, teaching methods, and programs to determine their effectiveness, efficiency, and utilization, and to ensure that school activities comply with federal, state, and local regulations. Establish, coordinate, and oversee particular programs across school districts, such as programs to evaluate student academic achievement. Set educational standards and goals, and help establish policies and procedures to carry them out. Determine allocations of funds for staff, supplies, materials, and equipment, and authorize purchases. Prepare and submit budget requests and recommendations, or grant proposals to solicit program funding. Recommend personnel actions related to programs and services. Develop partnerships with businesses, communities, and other organizations to help meet identified educational needs and to provide school-to-work programs. Collect and analyze survey data, regulatory information, and data on demographic and employment trends to forecast enrollment patterns and curriculum change needs.

**Skills:**

WorkKeys Scores      WorkKeys explanation on page ii

<b>Applied Math</b>	<b>5</b>	<b>Applied Technology</b>	<b>Listening</b>	<b>4</b>	<b>Locating Information</b>	<b>5</b>
<b>Observation</b>	<b>5</b>	<b>Reading Information</b>	<b>Teamwork</b>	<b>6</b>	<b>Writing</b>	<b>5</b>

**Personal Characteristics Required for this Career:**

Leadership, Dependability, Cooperation, Adaptability/Flexibility, Integrity, Stress Tolerance, Concern for Others, Self-Control, Initiative, Analytical Thinking, Persistence, Attention to Detail, Achievement/Effort

**Top Industries:** [Educational Services](#)

**Education:**

- High School: Core 40 Diploma
- Suggested High School Classes: Psychology, Sociology, Computers, and English Language
- Postsecondary: Master's Degree

**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	\$59,250	\$89,540	\$129,300
Indiana	Hourly	No Data Available	No Data Available	No Data Available
	Yearly	\$59,210	\$81,710	\$109,580

**Employment Trends:** Appendix A

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

# Education Administrator, Post-Secondary

**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:** Direct, coordinate, and evaluate the activities of personnel, including support staff, engaged in administering academic institutions, departments or alumni organizations. Recruit, hire, train, and terminate departmental personnel. Formulate strategic plans for the institution. Plan, administer, and control budgets, maintain financial records, and produce financial reports. Establish operational policies and procedures and make any necessary modifications, based on analysis of operations, demographics, and other research information. Participate in faculty and college committee activities. Represent institutions at community and campus events, in meetings with other institution personnel, and during accreditation processes. Promote the university by participating in community, state, and national events or meetings, and by developing partnerships with industry and secondary education institutions. Appoint individuals to faculty positions, and evaluate their performance. Direct activities of administrative departments such as admissions, registration, and career services. Consult with government regulatory and licensing agencies to ensure the institution's conformance with applicable standards. Write grants to procure external funding, and supervise grant-funded projects. Review registration statistics, and consult with faculty officials to develop registration policies. Direct scholarship, fellowship, and loan programs, performing activities such as selecting recipients and distributing aid. Audit the financial status of student organizations and facility accounts.

## Skills:

WorkKeys Scores      WorkKeys explanation on page ii

<b>Applied Math</b>	<b>5</b>	<b>Applied Technology</b>	<b>3</b>	<b>Listening</b>	<b>3</b>	<b>Locating Information</b>	<b>4</b>
<b>Observation</b>	<b>4</b>	<b>Reading Information</b>	<b>5</b>	<b>Teamwork</b>	<b>4</b>	<b>Writing</b>	<b>3</b>

## Personal Characteristics Required for this Career:

Dependability, Leadership, Cooperation, Initiative, Integrity, Self-Control, Concern for Others, Persistence, Attention to Detail, Adaptability/Flexibility, Analytical Thinking, Achievement/Effort, Independence

**Top Industries:** [Educational Services](#)

## Education:

- High School: Core 40 Diploma
- Suggested High School Classes: Psychology, Sociology, Computers, and English Language
- Postsecondary: Master's Degree

## Educational Institutions:

- Indiana University Kokomo
- Purdue University

## Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$24.15	\$42.49	\$83.65
	Yearly	\$50,240	\$88,390	\$174,000
Indiana	Hourly	\$20.40	\$35.20	\$81.15
	Yearly	\$42,440	\$73,220	\$168,800

**Employment Trends:** Appendix A

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

# Electrical and Electronic Equip. Assembler

**Description:** Assemble or modify electrical or electronic equipment, such as computers, test equipment telemetering systems, electric motors, and batteries.

**Tasks:** Read and interpret schematic drawings, diagrams, blueprints, specifications, work orders, or reports to determine materials requirements or assembly instructions. Assemble electrical or electronic systems or support structures and install components, units, subassemblies, wiring, or assembly casings, using rivets, bolts, soldering or micro-welding equipment. Adjust, repair, or replace electrical or electronic component parts to correct defects and to ensure conformance to specifications. Position, align, or adjust workpieces or electrical parts to facilitate wiring or assembly. Explain assembly procedures or techniques to other workers. Drill or tap holes in specified equipment locations to mount control units or to provide openings for elements, wiring, or instruments. Fabricate or form parts, coils, or structures according to specifications, using drills, calipers, cutters, or saws. Confer with supervisors or engineers to plan or review work activities or to resolve production problems. Inspect or test wiring installations, assemblies, or circuits for resistance factors or for operation and record results. Measure and adjust voltages to specified values to determine operational accuracy of instruments. Instruct customers in the installation, repair, or maintenance of products.

## Skills:

WorkKeys Scores      WorkKeys explanation on page ii

<b>Applied Math</b>	<b>3</b>	<b>Applied Technology</b>	<b>3</b>	<b>Listening</b>	<b>2</b>	<b>Locating Information</b>	<b>4</b>
<b>Observation</b>	<b>4</b>	<b>Reading Information</b>	<b>3</b>	<b>Teamwork</b>	<b>3</b>	<b>Writing</b>	<b>2</b>

## Personal Characteristics Required for this Career:

Attention to Detail, Dependability, Achievement/Effort, Cooperation, Integrity, Adaptability/Flexibility, Persistence, Initiative, Independence, Stress Tolerance, Self-Control, Innovation

**Top Industries:** [Manufacturing](#)

## Education:

- High School: General Diploma or Core 40 Diploma
- Suggested High School Classes: Mathematics and English Language
- Postsecondary: Short-term On-the-Job Training

## Educational Institutions:

- Kokomo Area Career Center
- West Central Indiana Career & Technical Education Cooperative
- Wildcat Creek Career Cooperative

## Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$9.38	\$14.38	\$22.99
	Yearly	\$19,510	\$29,910	\$47,820
Indiana	Hourly	\$8.63	\$11.70	\$18.37
	Yearly	\$17,960	\$24,340	\$38,210

**Employment Trends:** Appendix A

**Website for further information:** <http://www.bls.gov/OOH/production/assemblers-and-fabricators.htm>

# 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. 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. Prepare sketches or follow blueprints to determine the location of wiring or equipment and to ensure conformance to building and safety codes. Advise management on whether continued operation of equipment could be hazardous. Maintain current electrician's license or identification card to meet governmental regulations. Place conduit, pipes, or tubing, inside designated partitions, walls, or other concealed areas, and pull insulated wires or cables through the conduit to complete circuits between boxes. Repair or replace wiring, equipment, or fixtures, using hand tools or power tools. Install ground leads and connect power cables to equipment, such as motors. Assemble, install, test, or maintain electrical or electronic wiring, equipment, appliances, apparatus, or fixtures, using hand tools or power tools. Perform business management duties, such as maintaining records or files, preparing reports, or ordering supplies or equipment.

## Skills:

WorkKeys Scores      WorkKeys explanation on page ii

<b>Applied Math</b>	<b>5</b>	<b>Applied Technology</b>	<b>4</b>	<b>Listening</b>	<b>3</b>	<b>Locating Information</b>	<b>5</b>
<b>Observation</b>	<b>5</b>	<b>Reading Information</b>	<b>5</b>	<b>Teamwork</b>	<b>4</b>	<b>Writing</b>	<b>3</b>

## Personal Characteristics Required for this Career:

Dependability, Attention to Detail, Integrity, Analytical Thinking, Initiative, Leadership, Self-Control, Adaptability/Flexibility, Persistence, Stress Tolerance, Cooperation, Achievement/Effort, Innovation

**Top Industries:** [Construction](#)

## Education:

- High School: General Diploma or Core 40 Diploma
- Suggested High School Classes: Mathematics, Physics and English Language
- Postsecondary: Apprenticeship programs and Long-term On-the-Job Training

## Educational Institutions:

- Ivy Tech Community College

## Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$14.99	\$24.57	\$41.15
	Yearly	\$31,170	\$51,110	\$85,590
Indiana	Hourly	\$16.16	\$28.28	\$41.14
	Yearly	\$33,610	\$58,820	\$85,560

**Employment Trends:** Appendix A

**Website for further information:** [www.necanet.org](http://www.necanet.org)

# Electronics Engineer, Except Computer

**Description:** Research, design, develop, and test electronic components and systems for commercial, industrial, military or scientific use utilizing knowledge of electronic theory and materials properties. Design electronic circuits and components for use in fields such as telecommunications, aerospace guidance and propulsion control, acoustics or instruments and controls.

**Tasks:** Prepare engineering sketches or specifications for construction, relocation, or installation of equipment, facilities, products, or systems. Prepare documentation containing information such as confidential descriptions or specifications of proprietary hardware or software, product development or introduction schedules, product costs, or information about product performance weaknesses. Analyze electronics system requirements, capacity, cost, or customer needs to determine project feasibility. Operate computer-assisted engineering or design software or equipment to perform electronics engineering tasks. Plan or develop applications or modifications for electronic properties used in components, products, or systems to improve technical performance. Develop or perform operational, maintenance, or testing procedures for electronic products, components, equipment, or systems. Design electronic components, software, products, or systems for commercial, industrial, medical, military, or scientific applications. Inspect electronic equipment, instruments, products, or systems to ensure conformance to specifications, safety standards, or applicable codes or regulations. Research or develop electronics technologies for use in electric-drive vehicles. Prepare budget or cost estimates for equipment, construction, or installation projects or control expenditures.

## Skills:

WorkKeys Scores      WorkKeys explanation on page ii

<b>Applied Math</b> 4	<b>Applied Technology</b>	<b>Listening</b>	<b>Locating Information</b> 5
<b>Observation</b> 5	<b>Reading Information</b> 5	<b>Teamwork</b>	<b>Writing</b>

## Personal Characteristics Required for this Career:

Attention to Detail, Analytical Thinking, Dependability, Adaptability/Flexibility, Cooperation, Initiative, Innovation, Integrity, Independence, Achievement/Effort, Persistence, Self-Control

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

## Education:

- High School: Core 40 Diploma
- Suggested High School Classes: Mathematics and English Language
- Postsecondary: Bachelor's Degree in Electrical, Electronics and Communications Engineering

## Educational Institutions:

- Purdue University
- Purdue Polytechnic Institute

## Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$29.70	\$46.05	\$70.95
	Yearly	\$61,780	\$95,790	\$147,570
Indiana	Hourly	\$27.12	\$39.62	\$51.89
	Yearly	\$56,400	\$82,420	\$107,930

**Employment Trends:** Appendix A

**Website for further information:** [www.necanet.org](http://www.necanet.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. Plan, direct, and coordinate risk and insurance programs of establishments to control risks and losses. Review reports of securities transactions or price lists to analyze market conditions.

## Skills:

WorkKeys Scores      WorkKeys explanation on page ii

<b>Applied Math</b> 4	<b>Applied Technology</b>	<b>Listening</b> 3	<b>Locating Information</b> 4
<b>Observation</b> 4	<b>Reading Information</b> 3	<b>Teamwork</b> 3	<b>Writing</b> 3

## Personal Characteristics Required for this Career:

Dependability, Integrity, Attention to Detail, Achievement/Effort, Persistence, Leadership, Adaptability/Flexibility, Initiative, Stress Tolerance, Cooperation, Self-control, Analytical Thinking

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

## Education:

- High School: Core 40 or Core 40 Academic Honors Diploma
- Suggested High School Classes: Mathematics, English, Psychology, and Sociology
- Postsecondary: Bachelor's degree and some Master's degree

## Educational Institutions:

- Indiana University Kokomo
- Purdue University

## Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$30.04	\$55.44	\$90.00
	Yearly	\$62,480	\$115,320	\$187,200
Indiana	Hourly	\$23.13	\$45.24	\$82.57
	Yearly	\$48,110	\$94,090	\$171,730

**Employment Trends:** Appendix A

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

# First-line Supervisor/Manager of Construction Trades & Extraction Workers

**Description:** Supervise and coordinate the activities of construction or extraction workers.

**Tasks:** Supervise, coordinate, or schedule the activities of construction or extractive workers. Read specifications, such as blueprints, to determine construction requirements or to plan procedures. Inspect work progress, equipment, or construction sites to verify safety or to ensure that specifications are met. Locate, measure, and mark site locations or placement of structures or equipment, using measuring and marking equipment. Coordinate work activities with other construction project activities. Assign work to employees, based on material or worker requirements of specific jobs. Estimate material or worker requirements to complete jobs. Confer with managerial or technical personnel, other departments, or contractors to resolve problems or to coordinate activities. Order or requisition materials or supplies. Analyze worker or production problems and recommend solutions, such as improving production methods or implementing motivational plans. Train workers in construction methods, operation of equipment, safety procedures, or company policies. Record information such as personnel, production, or operational data on specified forms or reports. Provide assistance to workers engaged in construction or extraction activities, using hand tools or other equipment. Arrange for repairs of equipment or machinery.

## Skills:

WorkKeys Scores      WorkKeys explanation on page ii

<b>Applied Math</b> 4	<b>Applied Technology</b> 5	<b>Listening</b> 3	<b>Locating Information</b> 4
<b>Observation</b> 4	<b>Reading Information</b> 4	<b>Teamwork</b> 3	<b>Writing</b>

## Personal Characteristics Required for this Career:

Dependability, Attention to Detail, Leadership, Cooperation, Adaptability/Flexibility, Integrity, Stress Tolerance, Self-Control, Achievement/Effort, Integrity, Concern for Other, Analytical Thinking

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

## Education:

- High School: Core 40 Diploma
- Suggested High School Classes: Mathematics, Business, and Mechanics
- Postsecondary: Work experience in a related occupation, Associate's or Bachelor's degree in Management

## Educational Institutions:

- Kokomo Area Career Center
- Indian Trails Career Cooperative
- Ivy Tech Community College
- Wildcat Creek Career Cooperative

## Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$18.14	\$29.32	\$47.12
	Yearly	\$37,730	\$60,990	\$98,000
Indiana	Hourly	\$18.12	\$29.14	\$44.53
	Yearly	\$37,690	\$60,610	\$92,620

**Employment Trends:** Appendix A

**Website for further information:** <http://www.bls.gov/oes/current/oes471011.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

<b>Applied Math</b>	<b>4</b>	<b>Applied Technology</b>	<b>4</b>	<b>Listening</b>	<b>4</b>	<b>Locating Information</b>	<b>5</b>
<b>Observation</b>	<b>5</b>	<b>Reading Information</b>	<b>5</b>	<b>Teamwork</b>	<b>4</b>	<b>Writing</b>	<b>2</b>

## Personal Characteristics Required for this Career:

Leadership, Attention to Detail, Dependability, Stress Tolerance, Self-Control, Integrity, Cooperation, Adaptability/Flexibility, Initiative, Analytical Thinking, Persistence, Concern for Others, Independence

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

## Education:

- High School: Core 40 Diploma
- Suggested High School Classes: Business, Mathematics, Mechanics and English Language
- Postsecondary: Work experience in a related occupation, Associate's or Bachelor's degree in Management

## Educational Institutions:

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

## Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$17.96	\$29.88	\$46.28
	Yearly	\$37,350	\$62,150	\$96,270
Indiana	Hourly	\$16.82	\$27.72	\$44.08
	Yearly	\$34,980	\$57,650	\$91,690

**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. Develop or update procedures, policies, or standards. See more occupations related to this task. Develop work schedules according to budgets and workloads.

## Skills:

WorkKeys Scores      WorkKeys explanation on page ii

<b>Applied Math</b> 4	<b>Applied Technology</b>	<b>Listening</b> 3	<b>Locating Information</b> 4
<b>Observation</b> 4	<b>Reading Information</b> 5	<b>Teamwork</b> 4	<b>Writing</b> 3

## Personal Characteristics Required for this Career:

Integrity, Dependability, Leadership, Self-Control, Attention to Detail, Concern for Others, Stress Tolerance, Achievement/Effort, Adaptability/Flexibility, Cooperation, Analytical Thinking, Independence

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

## Education:

- High School: Core 40 Diploma
- Suggested High School Classes: Business, English Language, Mathematics, Computers
- Postsecondary: Work experience in a related occupation, Associate's or Bachelor's degree in Management

## Educational Institutions:

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

## Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$14.68	\$24.42	\$39.80
	Yearly	\$30,530	\$50,780	\$82,790
Indiana	Hourly	\$13.25	\$22.17	\$36.43
	Yearly	\$27,550	\$46,120	\$75,780

**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. Confer with management or subordinates to resolve worker problems, complaints, or grievances.

## Skills:

WorkKeys Scores      WorkKeys explanation on page ii

<b>Applied Math</b> 4	<b>Applied Technology</b> 4	<b>Listening</b> 4	<b>Locating Information</b> 4
<b>Observation</b> 4	<b>Reading Information</b> 4	<b>Teamwork</b> 4	<b>Writing</b> 3

## Personal Characteristics Required for this Career:

Dependability, Leadership, Attention to Detail, Integrity, Initiative, Concern for Others, Self-Control, Stress Tolerance, Analytical Thinking, Persistence, Independence, Achievement/Effort, Innovation

**Top Industries:** [Manufacturing](#)

## Education:

- High School: Core 40 Diploma
- Suggested High School Classes: Computers, Mechanics, and Business
- Postsecondary: Work experience in a related occupation, Associate's or Bachelor's degree

## Educational Institutions:

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

## Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$15.89	\$26.69	\$44.24
	Yearly	\$33,060	\$55,520	\$92,020
Indiana	Hourly	\$16.00	\$25.52	\$39.67
	Yearly	\$33,280	\$53,070	\$82,510

**Employment Trends:** Appendix A

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

# First-line Supervisor/Manager of Retail Sales Workers

**Description:** Directly supervise and coordinate the activities of retail sales workers in an establishment or department. Duties may include management function, such as purchasing, budgeting, accounting, and personnel work, in addition to supervisory duties.

**Tasks** Provide customer service by greeting and assisting customers and responding to customer inquiries and complaints. Direct and supervise employees engaged in sales, inventory-taking, reconciling cash receipts, or in performing services for customers. Monitor sales activities to ensure that customers receive satisfactory service and quality goods. Inventory stock and reorder when inventory drops to a specified level. Instruct staff on how to handle difficult and complicated sales. Hire, train, and evaluate personnel in sales or marketing establishments, promoting or firing workers when appropriate. Assign employees to specific duties. Enforce safety, health, and security rules. Examine merchandise to ensure that it is correctly priced and displayed and that it functions as advertised. Plan budgets and authorize payments and merchandise returns. Plan and prepare work schedules and keep records of employees' work schedules and time cards. Review inventory and sales records to prepare reports for management and budget departments. Examine products purchased for resale or received for storage to assess the condition of each product or item. Confer with company officials to develop methods and procedures to increase sales, expand markets, and promote business. Estimate consumer demand and determine the types and amounts of goods to be sold.

## Skills:

WorkKeys Scores      WorkKeys explanation on page ii

<b>Applied Math</b> 4	<b>Applied Technology</b>	<b>Listening</b>	<b>Locating Information</b> 5
<b>Observation</b> 5	<b>Reading Information</b> 5	<b>Teamwork</b>	<b>Writing</b>

## Personal Characteristics Required for this Career:

Self-Control, Dependability, Stress Tolerance, Integrity, Cooperation, Leadership, Social Orientation, Concern for Others, Independence, Attention to Detail, Initiative, Adaptability/Flexibility, Analytical Thinking

**Top Industries:** [Retail Trade](#) and [Self-Employed](#)

## Education:

- High School: Core 40 Diploma
- Suggested High School Classes: Computers, Business, and English Language
- Postsecondary: Work experience in a related occupation, Associate degree

## Educational Institutions:

- Harrison College
- Ivy Tech Community College

## Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$11.35	\$18.20	\$30.53
	Yearly	\$23,610	\$37,860	\$63,500
Indiana	Hourly	\$10.85	\$17.23	\$28.60
	Yearly	\$22,570	\$35,840	\$59,490

**Employment Trends:** Appendix A

**Website for further information:** <http://www.bls.gov/oes/current/oes411011.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. Perform or schedule repairs or preventive maintenance of vehicles or other equipment. Requisition needed personnel, supplies, equipment, parts, or repair services.

## Skills:

WorkKeys Score

WorkKeys explanation on page ii

Applied Math	3	Applied Technology	Listening	Locating Information	4
Observation	4	Reading Information	Teamwork	Writing	3
		3	3		

## Personal Characteristics Required for this Career:

Dependability, Leadership, Stress Tolerance, Cooperation, Attention to Detail, Integrity, Adaptability/Flexibility, Self-Control, Concern for Others, Initiative, Persistence, Achievement/Effort

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

## Education:

- High School: Core 40 Diploma
- Suggested High School Classes: Mathematics, Business, and English
- Postsecondary: Work experience in a related occupation, Associate degree

## Educational Institutions:

- Ivy Tech Community College

## Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$15.59	\$26.41	\$41.65
	Yearly	\$32,430	\$54,930	\$86,640
Indiana	Hourly	\$15.14	\$24.82	\$38.91
	Yearly	\$31,480	\$51,630	\$80,940

**Employment Trends:** Appendix A

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

# General and Operations Manager

**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. Recommend locations for new facilities or oversee the remodeling or renovating of current facilities.

## Skills:

WorkKeys Scores      WorkKeys explanation on page ii

<b>Applied Math</b>	<b>5</b>	<b>Applied Technology</b>	<b>5</b>	<b>Listening</b>	<b>4</b>	<b>Locating Information</b>	<b>4</b>
<b>Observation</b>	<b>4</b>	<b>Reading Information</b>	<b>5</b>	<b>Teamwork</b>	<b>5</b>	<b>Writing</b>	<b>3</b>

## Personal Characteristics Required for this Career:

Leadership, Dependability, Initiative, Integrity, Self-Control, Stress Tolerance, Attention to Detail, Achievement/Effort, Cooperation, Adaptability/Flexibility, Concern for Others, Analytical Thinking

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

## Education:

- High School: Core 40 Diploma
- Suggested High School Classes: Business, English, Mathematics, Computers
- Postsecondary: Bachelor Degree in Business Administration and Management and Associate's Degree

## Educational Institutions:

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

## Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$21.70	\$46.77	\$90.00+
	Yearly	\$45,130	\$97,270	\$187,200+
Indiana	Hourly	\$19.00	\$41.83	\$90.00+
	Yearly	\$39,520	\$87,000	\$187,200+

**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. 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. Apply statistical methods and perform mathematical calculations to determine manufacturing processes, staff requirements, and production standards. Study operations sequence, material flow, functional statements, organization charts, and project information to determine worker functions and responsibilities. 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. Analyze statistical data and product specifications to determine standards and establish quality and reliability objectives of finished product. Formulate sampling procedures and designs and develop forms and instructions for recording, evaluating, and reporting quality and reliability data.

## Skills:

WorkKeys Scores      WorkKeys explanation on page ii

<b>Applied Math</b>	<b>5</b>	<b>Applied Technology</b>	<b>4</b>	<b>Listening</b>	<b>4</b>	<b>Locating Information</b>	<b>5</b>
<b>Observation</b>	<b>5</b>	<b>Reading Information</b>	<b>5</b>	<b>Teamwork</b>	<b>3</b>	<b>Writing</b>	<b>4</b>

## Personal Characteristics Required for this Career:

Attention to Detail, Dependability, Integrity, Initiative, Analytical Thinking, Cooperation, Persistence, Self-Control, Stress Tolerance, Achievement/Effort, Adaptability/Flexibility, Innovation, Independence

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

## Education:

- High School: Core 40 Diploma
- Suggested High School Classes: Math, Science, Computers, English
- Postsecondary: Bachelor's degree

## Educational Institutions:

- Purdue University

## Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$25.24	\$39.18	\$59.33
	Yearly	\$52,510	\$81,490	\$123,400
Indiana	Hourly	\$22.42	\$33.57	\$48.45
	Yearly	\$46,630	\$69,830	\$100,770

**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. Demonstrate equipment functions and features to machine operators.

## Skills:

WorkKeys Scores      WorkKeys explanation on page ii

<b>Applied Math</b> 4	<b>Applied Technology</b> 4	<b>Listening</b> 3	<b>Locating Information</b> 4
<b>Observation</b> 4	<b>Reading Information</b> 4	<b>Teamwork</b> 3	<b>Writing</b> 2

## Personal Characteristics Required for this Career:

Dependability, Attention to Detail, Cooperation, Analytical Thinking, Initiative, Persistence, Independence, Concern for Other, Integrity, Achievement/Effort, Adaptability/Flexibility, Leadership, Self-Control

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

## Education:

- High School: Core 40 Diploma
- Suggested High School Classes: Mathematics, Science, and Computers
- Postsecondary: Long-term on-the-job training, Vocational or Technical school, Associate's degree in Industrial Mechanics and Maintenance Technology

## Educational Institutions:

- Kokomo Area Career Center
- Ivy Tech Community College

## Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$15.10	\$23.38	\$35.32
	Yearly	\$31,410	\$48,630	\$73,470
Indiana	Hourly	\$15.77	\$22.89	\$34.47
	Yearly	\$32,810	\$47,610	\$71,690

**Employment Trends:** Appendix A

**Website for further information:** [www.ntma.org](http://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. Prepare and maintain production reports. Set and monitor product standards, examining samples of raw products or directing testing during processing, to ensure finished products are of prescribed quality. 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

<b>Applied Math</b> 4	<b>Applied Technology</b> 3	<b>Listening</b> 3	<b>Locating Information</b> 4
<b>Observation</b> 4	<b>Reading Information</b> 4	<b>Teamwork</b> 4	<b>Writing</b> 3

## Personal Characteristics Required for this Career:

Leadership, Dependability, Integrity, Stress Tolerance, Attention to Detail, Adaptability/Flexibility, Cooperation, Initiative, Self-Control, Achievement/Effort, Persistence, Analytical Thinking

**Top Industries:** [Manufacturing](#)

## Education:

- High School: Core 40 Diploma
- Suggested High School Classes: Mathematics, Science, and Computers
- Postsecondary: Training in vocational schools, related On-the-job Experience or an Associate's or Bachelor's Degree

## Educational Institutions:

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

## Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$27.06	\$44.46	\$76.04
	Yearly	\$56,290	\$92,470	\$158,170
Indiana	Hourly	\$25.03	\$38.88	\$61.14
	Yearly	\$52,060	\$80,880	\$127,180

**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. Hook tow trucks to trailer hitches and fasten attachments, such as graders, plows, rollers, or winch cables to tractors, using hitchpins. Turn valves and open chutes to dump, spray, or release materials from dump cars or storage bins into hoppers.

## Skills:

WorkKeys Scores      WorkKeys explanation on page ii

<b>Applied Math</b> 3	<b>Applied Technology</b>	<b>Listening</b> 2	<b>Locating Information</b> 3
<b>Observation</b> 3	<b>Reading Information</b> 3	<b>Teamwork</b> 3	<b>Writing</b> 1

## Personal Characteristics Required for this Career:

Attention to Detail, Self-Control, Concern for Others, Dependability, Integrity, Achievement/Effort, Cooperation, Persistence, Stress Tolerance, Independence, Adaptability/Flexibility, Initiative

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

## Education:

- High School: General Diploma, Core 40 Diploma
- Suggested High School Classes: Mathematics and English
- Postsecondary: Training in vocational schools, related On-the-job Experience

## Educational Institutions:

- Area Career Centers

## Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$10.10	\$15.07	\$23.03
	Yearly	\$21,010	\$31,340	\$47,900
Indiana	Hourly	\$10.84	\$15.80	\$22.62
	Yearly	\$22,540	\$32,870	\$47,040

**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. 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. Weigh materials, products, containers, or samples to verify packaging weights or ingredient quantities.

## Skills:

WorkKeys Scores      WorkKeys explanation on page ii

<b>Applied Math</b> 3	<b>Applied Technology</b> 3	<b>Listening</b> 3	<b>Locating Information</b> 4
<b>Observation</b> 4	<b>Reading Information</b> 4	<b>Teamwork</b> 3	<b>Writing</b> 3

## Personal Characteristics Required for this Career:

Attention to Detail, Dependability, Integrity, Cooperation, Initiative, Self-Control, Adaptability/Flexibility, Stress Tolerance, Independence, Persistence, Achievement/Effort, Leadership, Concern for Others

**Top Industries:** [Manufacturing](#)

## Education:

- High School: General Diploma or Core 40 Diploma
- Suggested High School Classes: Mathematics and English
- Postsecondary: Training in vocational schools, related On-the-job Experience

## Educational Institutions:

- Area Career Centers

## Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$10.01	\$16.99	\$29.06
	Yearly	\$20,820	\$35,330	\$60,440
Indiana	Hourly	\$10.18	\$16.23	\$26.60
	Yearly	\$21,160	\$33,750	\$55,330

**Employment Trends:** Appendix A

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

# Laborers and Freight Stock, Material Mover

**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. Rig or dismantle props or equipment, such as frames, scaffolding, platforms, or backdrops, using hand tools.

## Skills:

WorkKeys Scores      WorkKeys explanation on page ii

<b>Applied Math</b> 3	<b>Applied Technology</b> 4	<b>Listening</b> 3	<b>Locating Information</b> 4
<b>Observation</b> 4	<b>Reading Information</b> 3	<b>Teamwork</b> 4	<b>Writing</b> 3

## Personal Characteristics Required for this Career:

Dependability, Stress Tolerance, Achievement/Effort, Integrity, Attention to Detail, Cooperation, Adaptability/Flexibility, Self-Control, Initiative, Persistence, Social Orientation, Independence

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

## Education:

- High School: General Diploma or Core 40 Diploma
- Suggested High School Classes: Mathematics and English
- Postsecondary: Training in vocational schools, related On-the-job Experience

## Educational Institutions:

- Ivy Tech Community College

## Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$8.51	\$11.74	\$19.73
	Yearly	\$17,700	\$24,430	\$41,030
Indiana	Hourly	\$8.28	\$11.48	\$18.72
	Yearly	\$17,220	\$23,880	\$38,950

**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

<b>Applied Math</b> 4	<b>Applied Technology</b>	<b>Listening</b> 5	<b>Locating Information</b> 4
<b>Observation</b> 4	<b>Reading Information</b> 5	<b>Teamwork</b> 3	<b>Writing</b> 4

## Personal Characteristics Required for this Career:

Attention to Detail, Dependability, Integrity, Self-Control, Stress Tolerance, Concern for Others, Cooperation, Adaptability/Flexibility, Initiative, Social Orientation, Persistence, Independence, Analytical Thinking

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

## Education:

- High School: Core 40 Diploma
- Suggested High School Classes: Mathematics, English, Biology, Chemistry, and Psychology
- Postsecondary: Technical Vocational

## Educational Institutions:

- Indiana University Kokomo
- Ivy Tech Community College

## Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$15.21	\$20.43	\$28.22
	Yearly	\$31,640	\$42,490	\$58,710
Indiana	Hourly	\$15.52	\$19.43	\$23.59
	Yearly	\$32,270	\$40,420	\$49,060

**Employment Trends:** Appendix A

**Website for further information:** [www.napnes.org](http://www.napnes.org)

**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

<b>Applied Math</b> 4	<b>Applied Technology</b> 4	<b>Listening</b> 2	<b>Locating Information</b> 4
<b>Observation</b> 4	<b>Reading Information</b> 4	<b>Teamwork</b> 4	<b>Writing</b> 1

### Personal Characteristics Required for this Career:

Attention to Detail, Dependability, Independence, Initiative, Self-Control, Adaptability/Flexibility, Integrity, Persistence, Innovation, Cooperation, Stress Tolerance, Achievement/Effort, Analytical Thinking

**Top Industries:** [Manufacturing](#)

### Education:

- High School: General Diploma, Core 40 Diploma
- Suggested High School Classes: Mathematics, Physics, and Science
- Postsecondary: Long-term on-the-job training, Vocational or Technical school, Associate's degree in Machine Tool Technology/Machinist and Machine Shop Technology/Assistant

### Educational Institutions:

- Kokomo Area Career Center
- Ivy Tech Community College
- West Central Indiana Career & Technical Education Cooperative
- Wildcat Creek Career Cooperative

### Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$11.84	\$19.22	\$29.20
	Yearly	\$24,620	\$39,980	\$60,740
Indiana	Hourly	\$11.34	\$18.95	\$27.64
	Yearly	\$23,580	\$39,410	\$57,500

**Employment Trends:** Appendix A

**Website for further information:** [www.pmpa.org](http://www.pmpa.org)

# Maintenance and Repair Worker, General

**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. Install equipment to improve the energy or operational efficiency of residential or commercial buildings. Set up and operate machine tools to repair or fabricate machine parts, jigs, fixtures, or tools.

## Skills:

WorkKeys Scores      WorkKeys explanation on page ii

<b>Applied Math</b> 4	<b>Applied Technology</b> 5	<b>Listening</b> 3	<b>Locating Information</b> 4
<b>Observation</b> 4	<b>Reading Information</b> 4	<b>Teamwork</b> 3	<b>Writing</b> 3

## Personal Characteristics Required for this Career:

Integrity, Attention to Detail, Cooperation, Dependability, Independence, Self-Control, Concern for Others, Adaptability/ Flexibility, Analytical Thinking, Initiative, Persistence, Innovation, Stress Tolerance

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

## Education:

- High School: General Diploma or GED
- Suggested High School Classes: Basic Mathematics
- Postsecondary: Moderate-term on-the-job training

## Educational Institutions:

- Ivy Tech Community College

## Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$10.27	\$17.39	\$28.45
	Yearly	\$21,370	\$36,170	\$59,170
Indiana	Hourly	\$10.42	\$17.48	\$27.17
	Yearly	\$21,680	\$36,350	\$56,520

**Employment Trends:** Appendix A

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

# 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:** Gather and organize information on problems or procedures. Analyze data gathered and develop solutions or alternative methods of proceeding. 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. Interview personnel and conduct on-site observation to ascertain unit functions, work performed, and methods, equipment, and personnel used. 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. Design, evaluate, recommend, and approve changes of forms and reports. Plan study of work problems and procedures, such as organizational change, communications, information flow, integrated production methods, inventory control, or cost analysis.

## Skills:

WorkKeys Scores

WorkKeys explanation on page ii

<b>Applied Math</b> 3	<b>Applied Technology</b>	<b>Listening</b>	<b>Locating Information</b> 4
<b>Observation</b> 4	<b>Reading Information</b> 4	<b>Teamwork</b>	<b>Writing</b>

## Personal Characteristics Required for this Career:

Dependability, Adaptability/Flexibility, Cooperation, Stress Tolerance, Integrity, Concern for Other, Leadership, Persistence, Analytical Thinking, Initiative, Attention to Detail, Achievement/Effort

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

## Education:

- High School: Core 40 Diploma
- Suggested High School Classes: English, Mathematics, Business
- Postsecondary: Bachelor's or higher degree, plus work experience, Business Administration and Management, Business/Commerce, General

## Educational Institutions:

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

## Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$21.81	\$38.89	\$71.21
	Yearly	\$45,360	\$80,880	\$148,110
Indiana	Hourly	\$19.71	\$33.44	\$63.57
	Yearly	\$41,000	\$69,550	\$132,220

**Employment Trends:** Appendix A

**Website for further information:** [www.amcf.org](http://www.amcf.org)

# Market Research Analyst and Marketing Specialist

**Description:** Research market conditions in local, regional, or national areas, or gather information to determine potential sales of a product or service, or create a marketing campaign. May gather information on competitors, prices, sales, and methods of marketing and distribution.

**Tasks:** Prepare reports of findings, illustrating data graphically and translating complex findings into written text. Seek and provide information to help companies determine their position in the marketplace. Gather data on competitors and analyze their prices, sales, and method of marketing and distribution. Collect and analyze data on customer demographics, preferences, needs, and buying habits to identify potential markets and factors affecting product demand. Devise and evaluate methods and procedures for collecting data, such as surveys, opinion polls, or questionnaires, or arrange to obtain existing data. Monitor industry statistics and follow trends in trade literature. Measure and assess customer and employee satisfaction. Measure the effectiveness of marketing, advertising, and communications programs and strategies. Forecast and track marketing and sales trends, analyzing collected data. Attend staff conferences to provide management with information and proposals concerning the promotion, distribution, design, and pricing of company products or services. Conduct research on consumer opinions and marketing strategies, collaborating with marketing professionals, statisticians, pollsters, and other professionals. Develop and implement procedures for identifying advertising needs. Direct trained survey interviewers.

## Skills:

WorkKeys Scores      WorkKeys explanation on page ii

<b>Applied Math</b>	<b>4</b>	<b>Applied Technology</b>	<b>Listening</b>	<b>4</b>	<b>Locating Information</b>	<b>4</b>
<b>Observation</b>	<b>4</b>	<b>Reading Information</b>	<b>Teamwork</b>	<b>3</b>	<b>Writing</b>	<b>4</b>

## Personal Characteristics Required for this Career:

Integrity, Analytical Thinking, Attention to Detail, Initiative, Dependability, Achievement/Effort, Cooperation, Persistence, Independence, Cooperation, Stress Tolerance, Adaptability/Flexibility, Self-Control, Innovation

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

## Education:

- High School: Core 40 Diploma
- Suggested High School Classes: Mathematics, Business, Management, Computers
- Postsecondary: Bachelor's Degree

## Educational Institutions:

- Purdue University

## Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$16.09	\$29.47	\$56.13
	Yearly	\$33,460	\$61,290	\$116,740
Indiana	Hourly	\$13.91	\$23.23	\$42.02
	Yearly	\$28,930	\$48,320	\$87,400

**Employment Trends:** Appendix A

**Website for further information:** [www.aama-ntl.org](http://www.aama-ntl.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. Assist drafters in developing the structural design of products, using drafting tools or computer-assisted drafting equipment or software. 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 7**  
**Observation**

**Applied Technology**  
**Reading Information 6**

**Listening**  
**Teamwork**

**Locating Information 6**  
**Writing**

## Personal Characteristics Required for this Career:

Analytical Thinking, Attention to Detail, Innovation, Dependability, Cooperation, Integrity, Adaptability/Flexibility, Persistence, Leadership, Independence, Stress Tolerance, Achievement/Effort, Initiative

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

## Education:

- High School: Core 40 Diploma
- Suggested High School Classes: Mathematics, Physics, Computers, and English
- Postsecondary: Bachelor's Degree in Mechanical Engineering

## Educational Institutions:

- Purdue University

## Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$25.58	\$39.93	\$60.79
	Yearly	\$53,210	\$83,060	\$126,430
Indiana	Hourly	\$24.08	\$34.41	\$50.29
	Yearly	\$50,090	\$71,580	\$104,600

**Employment Trends:** Appendix A

**Website for further information:** [www.asme.org](http://www.asme.org)

# Medical and Clinical Laboratory Technologist

**Description:** Perform complex medical laboratory tests for diagnosis, treatment, and prevention of disease. May train or supervise staff.

**Tasks:** Conduct chemical analysis of body fluids, including blood, urine, and spinal fluid, to determine presence of normal and abnormal components. Analyze laboratory findings to check the accuracy of the results. Enter data from analysis of medical tests and clinical results into computer for storage. Operate, calibrate and maintain equipment used in quantitative and qualitative analysis, such as spectrophotometers, calorimeters, flame photometers, and computer-controlled analyzers. Establish and monitor quality assurance programs and activities to ensure the accuracy of laboratory results. Set up, clean, and maintain laboratory equipment. Provide technical information about test results to physicians, family members and researchers. Supervise, train, and direct lab assistants, medical and clinical laboratory technicians and technologists, and other medical laboratory workers engaged in laboratory testing. Collect and study blood samples to determine the number of cells, their morphology, or their blood group, blood type, and compatibility for transfusion purposes, using microscopic techniques. Analyze samples of biological material for chemical content or reaction.

## Skills:

WorkKeys Scores      WorkKeys explanation on page ii

<b>Applied Math</b> 5	<b>Applied Technology</b>	<b>Listening</b>	<b>Locating Information</b> 4
<b>Observation</b> 4	<b>Reading Information</b> 5	<b>Teamwork</b> 3	<b>Writing</b> 3

## Personal Characteristics Required for this Career:

Attention to Detail, Dependability, Integrity, Analytical Thinking, Cooperation, Stress Tolerance, Adaptability/Flexibility, Self-Control, Concern for Others, Initiative, Independence, Persistence

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

## Education:

- High School: Core 40 or Core 40 Academic Honors Diploma
- Suggested High School Classes: Mathematics, Biology, Chemistry, and Health
- Postsecondary: Bachelor's degree in Clinical Laboratory Science/Medical Technology

## Educational Institutions:

- Indiana University Kokomo
- Purdue University

## Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$19.54	\$28.57	\$39.51
	Yearly	\$40,640	\$59,430	\$82,180
Indiana	Hourly	\$19.33	\$27.50	\$37.05
	Yearly	\$40,210	\$57,190	\$77,060

**Employment Trends:** Appendix A

**Website for further information:** [www.naacls.org](http://www.naacls.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:** Conduct and administer fiscal operations, including accounting, planning budgets, authorizing expenditures, establishing rates for services, and coordinating financial reporting. Direct, supervise and evaluate work activities of medical, nursing, technical, clerical, service, maintenance, and other personnel. 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. Consult with medical, business, and community groups to discuss service problems, respond to community needs, enhance public relations, coordinate activities and plans, and promote health programs.

## Skills:

WorkKeys Scores      WorkKeys explanation on page ii

<b>Applied Math</b>	<b>3</b>	<b>Applied Technology</b>	<b>4</b>	<b>Listening</b>	<b>4</b>	<b>Locating Information</b>	<b>4</b>
<b>Observation</b>	<b>4</b>	<b>Reading Information</b>	<b>4</b>	<b>Teamwork</b>	<b>3</b>	<b>Writing</b>	<b>4</b>

## Personal Characteristics Required for this Career:

Integrity, Leadership, Initiative, Dependability, Stress Tolerance, Adaptability/Flexibility, Cooperation, Self-Control, Achievement/Effort, Analytical Thinking, Attention to Detail, Independence, Persistence

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

## Education:

- High School: Core 40 or Core 40 Academic Honors Diploma
- Suggested High School Classes: Mathematics, Biology, Chemistry, and Health
- Postsecondary: Bachelor's, Master's or Doctoral degrees in Health Administration or Nursing Administration

## Educational Institutions:

- Indiana University Kokomo

## Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$26.87	\$44.62	\$77.47
	Yearly	\$55,890	\$92,810	\$161,150
Indiana	Hourly	\$22.85	\$38.01	\$61.75
	Yearly	\$47,540	\$79,060	\$128,440

**Employment Trends:** Appendix A

**Website for further information:** <http://www.bls.gov/ooh/management/medical-and-health-services-managers.htm>

# Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic

**Description:** Set up, operate, or tend more than one type of cutting or forming machine tool or robot.

**Tasks:** Observe machine operation to detect workpiece defects or machine malfunctions, adjusting machines as necessary. Set up and operate machines, such as lathes, cutters, shears, borers, millers, grinders, presses, drills, and auxiliary machines, to make metallic and plastic workpieces. Inspect workpieces for defects, and measure workpieces to determine accuracy of machine operation, using rules, templates, or other measuring instruments. Start machines and turn handwheels or valves to engage feeding, cooling, and lubricating mechanisms. Select, install, and adjust alignment of drills, cutters, dies, guides, and holding devices, using templates, measuring instruments, and hand tools. Move controls or mount gears, cams, or templates in machines to set feed rates and cutting speeds, depths, and angles. Position, adjust, and secure stock material or workpieces against stops, on arbors, or in chucks, fixtures, or automatic feeding mechanisms, manually or using hoists. Measure and mark reference points and cutting lines on workpieces, using traced templates, compasses, and rules. Compute data such as gear dimensions and machine settings, applying knowledge of shop mathematics. Remove burrs, sharp edges, rust, or scale from workpieces, using files, hand grinders, wire brushes, or power tools.

## Skills:

WorkKeys Scores      WorkKeys explanation on page ii

<b>Applied Math</b> 3	<b>Applied Technology</b> 4	<b>Listening</b>	<b>Locating Information</b> 4
<b>Observation</b> 4	<b>Reading Information</b> 3	<b>Teamwork</b> 4	<b>Writing</b> 2

## Personal Characteristics Required for this Career:

Attention to Detail, Dependability, Analytical Thinking, Initiative, Innovation, Integrity, Cooperation, Independence, Persistence, Achievement/Effort, Self-Control, Stress Tolerance, Adaptability/Flexibility

**Top Industries:** [Manufacturing](#)

## Education:

- High School: Core 40 Diploma
- Suggested High School Classes: Mathematics and English
- Postsecondary: Associate degree

## Educational Institutions:

- Ivy Tech Community College

## Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$10.57	\$16.42	\$23.95
	Yearly	\$21,980	\$34,140	\$49,820
Indiana	Hourly	\$9.27	\$16.15	\$22.87
	Yearly	\$19,280	\$33,600	\$47,560

**Employment Trends:** Appendix A

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

# 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. Supply, collect, or empty bedpans. 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

<b>Applied Math</b>	<b>3</b>	<b>Applied Technology</b>	<b>Listening</b>	<b>3</b>	<b>Locating Information</b>	<b>4</b>
<b>Observation</b>	<b>4</b>	<b>Reading Information</b>	<b>Teamwork</b>	<b>3</b>	<b>Writing</b>	<b>3</b>

## Personal Characteristics Required for this Career:

Dependability, Concern for Others, Cooperation, Stress Tolerance, Self-Control, Attention to Detail, Social Orientation, Adaptability/Flexibility, Integrity, Initiative, Independence, Innovation, Analytical Thinking

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

## Education:

- High School: Core 40 Diploma
- Suggested High School Classes: Mathematics, Biology, Chemistry, and Health
- Postsecondary: Post-secondary vocational award

## Educational Institutions:

- Ivy Tech Community College
- Area Career Centers

## Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$9.03	\$12.07	\$17.39
	Yearly	\$18,790	\$25,100	\$36,170
Indiana	Hourly	\$8.65	\$11.08	\$14.60
	Yearly	\$17,990	\$23,040	\$30,370

**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. Advise on health risks in the workplace or on health-related transition to retirement.

## Skills:

WorkKeys Scores      WorkKeys explanation on page ii

<b>Applied Math 4</b>	<b>Applied Technology</b>	<b>Listening</b>	<b>Locating Information 4</b>
<b>Observation</b>	<b>Reading Information 6</b>	<b>Teamwork</b>	<b>Writing</b>

## Personal Characteristics Required for this Career:

Integrity, Adaptability/Flexibility, Concern for Others, Dependability, Self-Control, Cooperation, Initiative, Persistence, Independence, Social Orientation, Stress Tolerance, Achievement/Effort, Analytical Thinking

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

## Education:

- High School: Core 40 or Core 40 Academic Honors Diploma
- Suggested High School Classes: Mathematics, Physics, Computer Science, and Writing
- Postsecondary: Master's degree in Occupation Therapy/Therapist

## Educational Institutions:

- Purdue University

## Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$25.32	\$37.89	\$54.30
	Yearly	\$52,670	\$78,810	\$112,950
Indiana	Hourly	\$24.21	\$36.72	\$52.32
	Yearly	\$50,360	\$76,370	\$108,820

**Employment Trends:** Appendix A

**Website for further information:** [www.aota.org](http://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. Collaborate with other health care professionals to plan, monitor, review, and evaluate the quality and effectiveness of drugs and drug regimens, providing advice on drug applications and characteristics.

## Skills:

WorkKeys Scores      WorkKeys explanation on page ii

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<b>Applied Math 6</b> <b>Observation</b>	<b>Applied Technology</b> <b>Reading Information 6</b>	<b>Listening</b> <b>Teamwork</b>	<b>Locating Information 5</b> <b>Writing</b>
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## Personal Characteristics Required for this Career:

Attention to Detail, Dependability, Integrity, Stress Tolerance, Concern for Others, Self-Control, Cooperation, Adaptability/Flexibility, Achievement/Effort, Initiative, Persistence, Social Orientation, Leadership

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

## Education:

- High School: Core 40 or Core 40 Academic Honors Diploma
- Suggested High School Classes: Mathematics, Physics, Computer Science, and Writing
- Postsecondary: First professional degree in Pharmacy and Pharmaceutical Sciences

## Educational Institutions:

- Purdue University

## Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$42.94	\$58.15	\$72.38
	Yearly	\$89,320	\$120,950	\$150,550
Indiana	Hourly	\$46.93	\$56.74	\$70.33
	Yearly	\$97,620	\$118,030	\$146,290

**Employment Trends:** Appendix A

**Website for further information:** [www.nabp.net](http://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. Deliver medications or pharmaceutical supplies to patients, nursing stations, or surgery.

## Skills:

WorkKeys Scores      WorkKeys explanation on page ii

<b>Applied Math</b> 4	<b>Applied Technology</b>	<b>Listening</b> 3	<b>Locating Information</b> 4
<b>Observation</b> 4	<b>Reading Information</b> 4	<b>Teamwork</b> 4	<b>Writing</b>

## Personal Characteristics Required for this Career:

Attention to Detail, Integrity, Concern for Others, Cooperation, Dependability, Stress Tolerance, Adaptability/Flexibility, Self-Control, Initiative, Achievement/Effort, Social Orientation, Independence

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

## Education:

- High School: Core 40 or Core 40 Academic Honors Diploma
- Suggested High School Classes: Mathematics, Physics, Computer Science, and Writing
- Postsecondary: On-the-job Training and Associate Degree

## Educational Institutions:

- Ivy Tech Community College

## Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$9.97	\$14.33	\$21.10
	Yearly	\$20,730	\$29,810	\$43,900
Indiana	Hourly	\$9.86	\$13.54	\$18.35
	Yearly	\$20,520	\$28,170	\$38,160

**Employment Trends:** Appendix A

**Website for further information:** [www.ashp.net](http://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. Prepare cost estimates for clients.

## Skills:

WorkKeys Scores      WorkKeys explanation on page ii

<b>Applied Math 4</b> <b>Observation</b>	<b>Applied Technology</b> <b>Reading Information 4</b>	<b>Listening</b> <b>Teamwork</b>	<b>Locating Information 4</b> <b>Writing</b>
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## Personal Characteristics Required for this Career:

Dependability, Attention to Detail, Integrity, Cooperation, Achievement/Effort, Initiative, Leadership, Innovation, Persistence, Analytical Thinking, Adaptability/Flexibility, Self-Control, Concern for Others

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

## Education:

- High School: Core 40 or Core 40 Academic Honors Diploma
- Suggested High School Classes: Mathematics and English
- Postsecondary: Moderate term on-the-job training and Apprenticeship

## Educational Institutions:

- Ivy Tech Community College

## Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$14.17	\$24.36	\$42.38
	Yearly	\$29,470	\$50,660	\$88,160
Indiana	Hourly	\$16.46	\$26.93	\$41.99
	Yearly	\$34,230	\$56,020	\$87,350

**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

<b>Applied Math 4</b> <b>Observation</b>	<b>Applied Technology</b> <b>Reading Information 5</b>	<b>Listening</b> <b>Teamwork</b>	<b>Locating Information 4</b> <b>Writing</b>
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## Personal Characteristics Required for this Career:

Integrity, Self-Control, Stress Tolerance, Attention to Detail, Dependability, Cooperation, Initiative, Concern for Others, Independence, Adaptability/Flexibility and Leadership

**Top Industries:** [Government](#)

## Education:

- High School: Core 40 Diploma
- Suggested High School Classes: Psychology, Writing, English Language
- Postsecondary: Associate's degree in Criminal Justice

## Educational Institutions:

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

## Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$15.88	\$27.31	\$44.45
	Yearly	\$33,030	\$56,810	\$92,450
Indiana	Hourly	\$16.22	\$22.42	\$30.59
	Yearly	\$33,740	\$46,630	\$63,620

**Employment Trends:** Appendix A

**Website for more information:** [www.sheriffs.org](http://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

<b>Applied Math 5</b>	<b>Applied Technology</b>	<b>Listening</b>	<b>Locating Information 5</b>
<b>Observation</b>	<b>Reading Information 5</b>	<b>Teamwork</b>	<b>Writing</b>

## Personal Characteristics Required for this Career:

Dependability, Integrity, Independence, Concern for Others, Initiative, Analytical Thinking, Self-Control, Achievement/Effort, Social Orientation, Leadership, Attention to Detail, Cooperation, Innovation

**Top Industries:** [Educational Services](#)

## Education:

- High School: Core 40 or Core 40 Academic Honors Diploma
- Suggested High School Classes: Mathematics, English, Science, Psychology, and Sociology
- Postsecondary: Bachelor's degree, most require a Doctorate degree

## Educational Institutions:

- Indiana University Kokomo
- Purdue University

## Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	-	-	-
	Yearly	\$24,700	\$62,330	\$134,890
Indiana	Hourly	-	-	-
	Yearly	\$19,560	\$56,970	\$117,200

**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

<b>Applied Math</b> 4	<b>Applied Technology</b>	<b>Listening</b>	<b>Locating Information</b> 4
<b>Observation</b> 4	<b>Reading Information</b> 3	<b>Teamwork</b>	<b>Writing</b>

## Personal Characteristics Required for this Career:

Cooperation, Self-Control, Concern for Others, Dependability, Stress Tolerance, Adaptability/Flexibility, Integrity, Leadership, Achievement/Effort, Initiative, Social Orientation, Persistence, Attention to Detail

**Top Industries:** [Educational Services](#)

## Education:

- High School: Core 40 or Core 40 Academic Honors Diploma
- Suggested High School Classes: English, Psychology, Sociology, Mathematics
- Postsecondary: Bachelor's degree

## Educational Institutions:

- Indiana University Kokomo
- Purdue University

## Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	-	-	-
	Yearly	\$36,040	\$54,120	\$83,910
Indiana	Hourly	-	-	-
	Yearly	\$33,480	\$49,310	\$71,310

**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

<b>Applied Math</b> 5	<b>Applied Technology</b>	<b>Listening</b>	<b>Locating Information</b> 4
<b>Observation</b> 4	<b>Reading Information</b> 5	<b>Teamwork</b>	<b>Writing</b> 4

## Personal Characteristics Required for this Career:

Attention to Detail, Integrity, Cooperation, Concern for Others, Dependability, Stress Tolerance, Self-Control, Persistence, Social Orientation, Analytical Thinking, Leadership, Adaptability/Flexibility, Independence

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

## Education:

- High School: Core 40 or Core 40 Academic Honors Diploma
- Suggested High School Classes: Mathematics, Biology, Chemistry, English, and Psychology
- Postsecondary: Associate's or Bachelor's degrees and licensing examination. Master's degree necessary for teaching

## Educational Institutions:

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

## Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$22.06	\$32.04	\$47.54
	Yearly	\$45,880	\$66,640	\$98,880
Indiana	Hourly	\$19.96	\$27.77	\$37.57
	Yearly	\$41,520	\$57,770	\$78,140

**Employment Trends:** Appendix A

**Website for more information:** [www.nursingworld.org](http://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. Read prescription, measure arterial blood gases, and review patient information to assess patient condition. 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

<b>Applied Math</b> 5	<b>Applied Technology</b>	<b>Listening</b>	<b>Locating Information</b> 6
<b>Observation</b> 6	<b>Reading Information</b> 6	<b>Teamwork</b>	<b>Writing</b>

## Personal Characteristics Required for this Career:

Cooperation, Concern for Others, Attention to Detail, Dependability, Integrity, Self-Control, Stress Tolerance, Adaptability/Flexibility, Analytical Thinking, Independence, Initiative, Persistence, Social Orientation

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

## Education:

- High School: Core 40 or Core 40 Academic Honors Diploma
- Suggested High School Classes: Mathematics, Physics, and Science
- Postsecondary: Associate degree

## Educational Institutions:

- Ivy Tech Community College

## Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$19.89	\$27.27	\$37.61
	Yearly	\$41,380	\$56,730	\$78,230
Indiana	Hourly	\$19.55	\$25.50	\$33.62
	Yearly	\$40,660	\$53,040	\$69,920

**Employment Trends:** Appendix A

**Website for further information:** [www.aarc.org](http://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:** 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. Direct and coordinate activities involving sales of manufactured products, services, commodities, real estate or other subjects of sale. 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

<b>Applied Math</b>	<b>4</b>	<b>Applied Technology</b>	<b>3</b>	<b>Listening</b>	<b>4</b>	<b>Locating Information</b>	<b>5</b>
<b>Observation</b>	<b>5</b>	<b>Reading Information</b>	<b>5</b>	<b>Teamwork</b>	<b>5</b>	<b>Writing</b>	<b>5</b>

## Personal Characteristics Required for this Career:

Integrity, Dependability, Achievement/Effort, Leadership, Initiative, Persistence, Self-Control, Stress Tolerance, Adaptability/Flexibility, Attention to Detail, Independence, Analytical Thinking, Cooperation

## Education:

- High School: Core 40 or Core 40 Academic Honors Diploma
- Suggested High School Classes: Business, English, and Mathematics
- Postsecondary: Bachelor's degree and work experience in related occupation

**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	\$25.78	\$53.20	\$90.00+
	Yearly	\$53,620	\$110,660	\$187,200+
Indiana	Hourly	\$23.63	\$45.34	\$88.29
	Yearly	\$49,150	\$94,320	\$183,650

**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:** 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. Negotiate prices and terms of sales and service agreements. 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. Prepare sales contracts for orders obtained, and submit orders for processing. Select the correct products or assist customers in making product selections, based on customers' needs, product specifications, and applicable regulations. Collaborate with colleagues to exchange information such as selling strategies and marketing information.

## Skills:

WorkKeys Scores      WorkKeys explanation on page ii

<b>Applied Math</b> 4	<b>Applied Technology</b>	<b>Listening</b> 4	<b>Locating Information</b> 4
<b>Observation</b> 4	<b>Reading Information</b> 4	<b>Teamwork</b> 3	<b>Writing</b> 4

## Personal Characteristics Required for this Career:

Integrity, Initiative, Cooperation, Dependability, Persistence, Stress Tolerance, Achievement/Effort, Self-Control, Adaptability/Flexibility, Independence, Attention to Detail, Innovation, Leadership

## Education:

- High School: Core 40 or Core 40 Academic Honors Diploma
- Suggested High School Classes: Business, English, and Mathematics
- Postsecondary: Bachelor's degree and work experience in related occupation

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

## Educational Institutions:

- Indiana University Kokomo
- Purdue University

## Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$18.00	\$36.13	\$71.64
	Yearly	\$37,430	\$75,140	\$149,010
Indiana	Hourly	\$18.53	\$35.16	\$72.22
	Yearly	\$38,540	\$73,130	\$150,220

**Employment Trends:** Appendix A

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

# Shipping, Receiving and Traffic Clerks

**Description:** Verify and maintain records on incoming and outgoing shipments. Prepare items for shipment. Duties include assembling, addressing, stamping, and shipping merchandise or material; receiving, unpacking, verifying and recording incoming merchandise or material; and arranging for the transportation of products.

**Tasks:** Examine shipment contents and compare with records such as manifests, invoices, or orders to verify accuracy. Record shipment data, such as weight, charges, space availability, damages, or discrepancies for reporting, accounting, or recordkeeping purposes. Prepare documents, such as work orders, bills of lading, or shipping orders, to route materials. Confer or correspond with establishment representatives to rectify problems, such as damages, shortages, or nonconformance to specifications. Pack, seal, label, or affix postage to prepare materials for shipping, using hand tools, power tools, or postage meter. Contact carrier representatives to make arrangements or to issue instructions for shipping and delivery of materials. Deliver or route materials to departments using handtruck, conveyor, or sorting bins. Requisition and store shipping materials and supplies to maintain inventory of stock. Determine shipping methods, routes, or rates for materials to be shipped. Compute amounts, such as space available, shipping, storage, or demurrage charges, using computer or price list. Compare shipping routes or methods to determine which have the least environmental impact.

## Skills:

WorkKeys Scores      WorkKeys explanation on page ii

<b>Applied Math</b> 3	<b>Applied Technology</b> 3	<b>Listening</b> 3	<b>Locating Information</b> 4
<b>Observation</b> 4	<b>Reading Information</b> 3	<b>Teamwork</b> 3	<b>Writing</b> 3

## Personal Characteristics Required for this Career:

Dependability, Attention to Detail, Integrity, Cooperation, Self-Control, Adaptability/Flexibility, Stress Tolerance, Concern for Other, Initiative, Achievement/Effort, Leadership, Persistence

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

## Education:

- High School: General Diploma or Core 40 Diploma
- Suggested High School Classes: Mathematics and English
- Postsecondary: Training in vocational schools, related On-the-job Experience

## Educational Institutions:

- Ivy Tech Community College

## Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$9.52	\$14.39	\$22.49
	Yearly	\$19,800	\$29,930	\$46,780
Indiana	Hourly	\$9.66	\$14.31	\$21.74
	Yearly	\$20,090	\$29,770	\$45,220

**Employment Trends:** Appendix A

**Website for further information:** <http://www.bls.gov/OOH/office-and-administrative-support/material-recording-clerks.htm>

# 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

<b>Applied Math</b> 3	<b>Applied Technology</b>	<b>Listening</b>	<b>Locating Information</b> 4
<b>Observation</b> 4	<b>Reading Information</b> 3	<b>Teamwork</b> 3	<b>Writing</b>

## Personal Characteristics Required for this Career:

Attention to Detail, Dependability, Cooperation, Self-Control, Innovation, Stress Tolerance, Concern for Others, Integrity, Analytical Thinking, Initiative, Independence, Adaptability/Flexibility

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

## Education:

- High School: General Diploma
- Suggested High School Classes: Mathematics and Science
- Postsecondary: Vocational or Technical School, Certified Production Technician Certification

## Educational Institutions:

- Heartland Career Center
- Kokomo Area Career Center
- Ivy Tech Community College
- Wild Creek Career Cooperative

## Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$8.94	\$13.64	\$23.36
	Yearly	\$18,590	\$28,370	\$48,590
Indiana	Hourly	\$8.70	\$12.78	\$24.63
	Yearly	\$18,100	\$26,580	\$51,230

**Employment Trends:** Appendix A

**Website for more information:** [www.bls.gov/ooh/production/assemblers-and-fabricators.htm](http://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

<b>Applied Math</b> 5	<b>Applied Technology</b> 3	<b>Listening</b>	<b>Locating Information</b> 4
<b>Observation</b> 4	<b>Reading Information</b> 4	<b>Teamwork</b> 3	<b>Writing</b>

## Personal Characteristics Required for this Career:

Attention to Detail, Dependability, Integrity, Analytical Thinking, Initiative, Cooperation, Independence, Achievement/Effort, Adaptability/Flexibility, Innovation, Self-Control, Persistence, Stress Tolerance

**Top Industries:** [Manufacturing](#)

## Education:

- High School: General Diploma, Core 40 Diploma
- Suggested High School Classes: Mathematics, Physics, and Science
- Postsecondary: Long-term on-the-job training, Vocational or Technical school, Associate's degree in Machine Tool Technology/Machinist

## Educational Institutions:

- Ivy Tech Community College

## Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$15.05	\$23.50	\$34.67
	Yearly	\$31,310	\$48,890	\$72,120
Indiana	Hourly	\$14.38	\$24.18	\$35.21
	Yearly	\$29,910	\$50,290	\$73,240

**Employment Trends:** Appendix A

**Website for further information:** <http://www.bls.gov/OOH/production/machinists-and-tool-and-die-makers.htm>

# 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. Obtain receipts or signatures for delivered goods and collect payment for services when required. Inventory and inspect goods to be moved to determine quantities and conditions.

## Skills:

WorkKeys Scores      WorkKeys explanation on page ii

<b>Applied Math</b> 3	<b>Applied Technology</b>	<b>Listening</b>	<b>Locating Information</b> 4
<b>Observation</b> 4	<b>Reading Information</b> 4	<b>Teamwork</b> 3	<b>Writing</b>

## Personal Characteristics Required for this Career:

Dependability, Self-Control, Attention to Detail, Integrity, Stress Tolerance, Cooperation, Adaptability/Flexibility, Independence, Achievement/Effort, Concern for Others, Initiative, Persistence

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

## Education:

- High School: General Diploma
- Suggested High School Classes: Driver Training, Automotive Mechanics
- Postsecondary: Short-term on-the-job training, Vocational Technical School, CDL license required

## Educational Institutions:

- Ivy Tech Community College

## Salaries/Wage:

Location	Pay Period	Low	Median	High
United States	Hourly	\$12.37	\$19.00	\$29.40
	Yearly	\$25,740	\$39,520	\$61,150
Indiana	Hourly	\$12.77	\$18.93	\$29.42
	Yearly	\$26,560	\$39,380	\$61,190

**Employment Trends:** Appendix A

**Website for more information:** [www.trucking.org](http://www.trucking.org)

**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			
<b>Applied Math 3</b>	<b>Applied Technology</b>	<b>Listening</b>	<b>Locating Information 4</b>	
<b>Observation 4</b>	<b>Reading Information 3</b>	<b>Teamwork 4</b>	<b>Writing</b>	

**Personal Characteristics Required for this Career:**

Attention to Detail, Dependability, Adaptability/Flexibility, Independence, Innovation, Integrity, Leadership, Analytical Thinking, Initiative, Persistence, Cooperation, Self-Control, Stress Tolerance

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

**Education:**

- High School: Core 40 Diploma
- Suggested High School Classes: Computers, Shop, and Mathematics
- Postsecondary: Career Center, Vocational School, Community College Associate of Applied Science or Technical certificate in Manufacturing & Industrial Technology with a specialty in Welding

**Educational Institutions:**

- Heartland Career Center
- Indiana Trails Career Cooperative
- Ivy Tech Community College
- Kokomo Area Career Center
- West Central Indiana Career & Technical Education Cooperative

**Salaries/Wage:**

Location	Pay Period	Low	Median	High
United States	Hourly	\$11.20	\$16.91	\$24.86
	Yearly	\$23,290	\$35,180	\$51,720
Indiana	Hourly	\$11.77	\$16.30	\$26.20
	Yearly	\$24,480	\$33,910	\$54,500

**Employment Trends:** Appendix A

**Website for further information:** [www.aws.org](http://www.aws.org)

## Appendix A – Occupational Trends for West Central Indiana

SOC Code	Occupational Title	2015 Employment	2020 Projection	Total Growth	% Change
13-2011	Accountants and Auditors	1,053	1,159	106	10.1
11-9041	Engineering Managers	228	233	5	2.2
51-2099	Assemblers and Fabricators, All Other	1,454	1,558	104	7.2
49-3023	Automotive Service Technicians and Mechanics	835	991	156	18.7
43-3031	Bookkeeping, Accounting, and Auditing Clerks	2,243	2,522	279	12.4
47-2031	Carpenters	1,087	1,326	239	22
15-1142	Network and computer systems administrators	367	458	91	24.8
15-1133	Software developers, applications	274	334	60	21.9
15-1121	Computer systems analysts	454	529	75	16.5
51-4011	Computer-Controlled Machine Tool Operators, Metal and Plastic	765	895	130	17
11-9021	Construction Managers	534	638	104	19.5
21-1012	Educational, Vocational, and School Counselors	426	504	78	18.3
43-4051	Customer Service Representatives	1,895	2,147	252	13.3
51-4031	Cutting, Punching, and Press Machine Setters, Operators, and	828	827	-1	-0.1
29-2021	Dental Hygienists	203	264	61	30
11-9032	Education Administrators, Secondary	61	79	18	29.5
11-9033	Education Administrators, Postsecondary	218	260	42	19.3
51-2022	Electrical and Electronic Equipment Assemblers	598	557	-41	-6.9
47-2111	Electricians	945	1,089	144	15.2
17-2072	Electronics Engineers, Except Computer	122	119	-3	-2.5
11-3031	Financial Managers	454	470	16	3.5
47-1011	First-Line Supervisors/Managers of Construction Trades and E	494	625	131	26.5
49-1011	First-Line Supervisors/Managers of Mechanics, Installers, an	663	740	77	11.6
43-1011	First-Line Supervisors/Managers of Office and Administrative	1,439	1,599	160	11.1
51-1011	First-Line Supervisors/Managers of Production and Operating	1,833	1,856	23	1.3
41-1011	First-Line Supervisors/Managers of Retail Sales Workers	2,615	2,813	198	7.6
53-1031	First-Line Supervisors/Managers of Transportation and Material Movers	280	316	36	12.9
11-1021	General and Operations Managers	1,466	1,481	15	1
17-2112	Industrial Engineers	559	576	17	3
49-9041	Industrial Machinery Mechanics	941	1,112	171	18.2
11-3051	Industrial Production Managers	621	674	53	8.5
53-7051	Industrial Truck and Tractor Operators	1,493	1,591	98	6.6
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	1,387	1,456	69	5
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	3,090	3,472	382	12.4
29-2061	Licensed Practical and Licensed Vocational Nurses	1,270	1,523	253	19.9
51-4041	Machinists	1,213	1,318	105	8.7
49-9071	Maintenance and repair workers, general	1,934	2,076	142	7.3
13-1111	Management Analysts	482	558	76	15.8
13-1161	Market research analysts and marketing specialists	242	316	74	30.6
17-2141	Mechanical Engineers	670	672	2	0.3
29-2011	Medical and Clinical Laboratory Technologists	229	251	22	9.6
11-9111	Medical and Health Services Managers	443	536	93	21
51-4081	Multiple Machine Tool Setters, Operators, and Tenders, Metal	213	201	-12	-5.6
31-1014	Nursing Aides, Orderlies, and Attendants	2,317	2,771	454	19.6

29-1122	Occupational Therapists	144	184	40	27.8
29-1051	Pharmacists	427	531	104	24.4
29-2052	Pharmacy Technicians	587	771	184	31.3
47-2152	Plumbers, Pipefitters, and Steamfitters	659	836	177	26.9
33-3051	Police and Sheriff's Patrol Officers	831	903	72	8.7
25-1000	Postsecondary Teachers	3,186	3,764	578	18.1
25-2000	Primary, Secondary, and Special Education School Teachers	6,931	7,949	1,018	14.7
29-1111	Registered Nurses	3,844	4,791	947	24.6
29-1126	Respiratory Therapists	209	264	55	26.3
11-2022	Sales Managers	359	390	31	8.6
41-4011	Sales Representatives, Wholesale and Manufacturing, Technical	313	351	38	12.1
43-5071	Shipping, Receiving, and Traffic Clerks	938	899	-39	-4.2
51-2092	Team Assemblers	5,118	5,235	117	2.3
51-4111	Tool and Die Makers	526	509	-17	-3.2
53-3032	Truck Drivers, Heavy and Tractor-Trailer	2,645	3,166	521	19.7
51-4121	Welders, Cutters, Solderers, and Brazers	894	996	102	11.4

## Appendix B – University and College Program Information

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### HARRISON COLLEGE

#### ACADEMIC PROGRAMS AND DEGREES

##### Associate's Degree

- Accounting
- Accounting Assistant
- Administrative Professional
- Business Administration
- Human Resources
- Medical Assistant
- Medical Billing
- Medical Coding Technology

#### Contact Information

Indiana Business College - Lafayette  
4705 Meijer Ct.  
Lafayette, IN 47907  
Phone: (765) 477-9550  
Website: <http://harrison.edu/campuses/lafayette>

### 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](http://www.iuk.edu)

## INDIANA WESLEYAN UNIVERSITY

### ACADEMIC PROGRAMS AND DEGRESS

#### 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](http://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**

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### **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](http://www.ivytech.edu/lafayette)

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

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

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

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

## Appendix D – Career Center Program Information

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### 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/](http://www.hcc.k12.in.us/)

## Appendix D continued - Career Center Program Information

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### 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](http://www.kokomoschools.com/kacc)

## Appendix D continued - Career Center Program Information

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### 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](http://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](http://www.tsc.k12.in.us)

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