



Key Demand Occupations – 2012 – Ann Arbor Area

College Degree Required

| Education | Title / Description / Key Skills | Projected Job Growth | % Job Growth 2002 - 2012 | Hourly Wage |
|--|---|----------------------|--------------------------|----------------|
| Management Occupations | | | | |
| General and Operations Managers (11-1021) | | | | |
| Work Exp. + Bachelor's | Plan, direct, or coordinate the operations of companies or public and private sector organizations. Duties and responsibilities include formulating policies, managing daily operations, and planning the use of materials and human resources. Key Skills: Active Listening, Management of Personnel Resources, Time Management, Judgment & Decision Making | 360 | 17.6% | \$47.30 |
| Sales Managers (11-2022) | | | | |
| Work Exp. + Bachelor's | Direct 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. Key Skills: Active Listening, Speaking, Mathematics, Time Management, Service Orientation | 160 | 34.0% | \$44.20 |
| Financial Managers (11-3031) | | | | |
| Work Exp. + Bachelor's | Plan, direct, and coordinate accounting, investing, banking, insurance, securities, and other financial activities of a branch, office, or department of an establishment. Key Skills: Management of Financial Resources, Mathematics, Critical Thinking, Judgment & Decision Making, Reading Comprehension | 125 | 19.1% | \$47.28 |
| Engineering Managers (11-9041) | | | | |
| Work Exp. + Bachelor's | Plan, direct, or coordinate activities in such fields as architecture and engineering or research and development in these fields. Key Skills: Reading Comprehension, Mathematics, Active Listening, Critical Thinking, Complex Problem Solving | 145 | 22.8% | \$52.73 |
| Professional Occupations | | | | |
| Management Analysts (13-1111) | | | | |
| Work Exp. + Bachelor's | 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. Key Skills: Critical Thinking, Judgment & Decision Making, Active Listening, Coordination, Time Management | 220 | 31.4% | \$38.84 |
| Accountants and Auditors (13-2011) | | | | |
| Bachelor's | Examine, analyze, and interpret accounting records for the purpose of giving advice or preparing statements. Install or advise on systems of recording costs or other financial and budgetary data. Key Skills: Mathematics, Active Listening, Critical Thinking, Monitoring, Judgment & Decision Making | 335 | 16.9% | \$26.82 |
| Computer Programmers (15-1021) | | | | |
| Bachelor's | Convert project specifications and statements of problems and procedures to detailed logical flow charts for coding into computer language. Develop and write computer programs to store, locate, and retrieve specific documents, data, and information. May program web sites. Key Skills: Programming, Critical Thinking, Complex Problem Solving, Active Listening, Reading Comprehension | 195 | 15.3% | \$30.81 |
| Computer Software Engineers, Applications (15-1031) | | | | |
| Bachelor's | Develop, create, and modify general computer applications software or specialized utility programs. Analyze user needs and develop software solutions. Design software or customize software for client use with the aim of optimizing operational efficiency. May analyze and design databases within an application area, working individually or coordinating database development as part of a team. Key Skills: Programming, Critical Thinking, Complex Problem Solving, Active Listening, Troubleshooting | 610 | 47.4% | \$34.31 |
| Computer Support Specialists (15-1041) | | | | |
| Associate's | Provide technical assistance to computer system users. Answer questions or resolve computer problems for clients in person, via telephone or from remote location. May provide assistance concerning the use of computer hardware and software, including printers. Key Skills: Troubleshooting, Reading Comprehension, Critical Thinking, Active Listening, Writing | 225 | 27.2% | \$19.80 |
| Computer Systems Analysts (15-1051) | | | | |
| Bachelor's | Analyze science, engineering, business, and all other data processing problems for application to electronic data processing systems. Analyze user requirements, procedures, and problems to automate or improve existing systems and review computer system capabilities, workflow, and scheduling limitations. Key Skills: Active Learning, Reading Comprehension, Complex Problem Solving, Critical Thinking, Active Listening | 435 | 34.1% | \$32.30 |

OJT = On-the-job Training

Note: The forecasts above highlight positive long-term growth occupations. They do not necessary reflect current hiring demand.

* Michigan Wage Data

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| Network and Computer Systems Administrators (15-1071) | | | | |
| | | 185 | 39.0% | \$27.86 |
| Bachelor's | Install, configure, and support an organization's local area network (LAN), wide area network (WAN), and Internet system or a segment of a network system. Maintain network hardware and software. Monitor network to ensure network availability to all system users and perform necessary maintenance to support network availability. Key Skills: Reading Comprehension, Troubleshooting, Active Listening, Complex Problem Solving | | | |
| Network Systems and Data Communication Analysts (15-1081) | | | | |
| | | 220 | 51.7% | \$31.87 |
| Bachelor's | Analyze, design, test, and evaluate network systems, such as local area networks (LAN), wide area networks (WAN), Internet, intranet, and other data communications systems. Perform network modeling, analysis, and planning. Research and recommend network and data communications hardware and software. Includes telecommunications specialists who deal with the interfacing of computer and communications equipment. May supervise computer programmers. Key Skills: Equipment Selection, Troubleshooting, Complex Problem Solving, Active Listening, Active Learning | | | |
| Industrial Engineers (17-2112) | | | | |
| | | 185 | 23.0% | \$35.49 |
| Bachelor's | 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. Key Skills: Critical Thinking, Active Listening, Time Management, Reading Comprehension, Complex Problem Solving | | | |
| Public Relations Specialists (27-3031) | | | | |
| | | 130 | 26.1% | \$24.69 |
| Bachelor's | Engage in promoting or creating good will for individuals, groups, or organizations by writing or selecting favorable publicity material and releasing it through various communications media. May prepare and arrange displays, and make speeches. Key Skills: Writing, Critical Thinking, Reading Comprehension, Active Listening, Judgment & Decision Making | | | |
| Health Care Occupations | | | | |
| Registered Nurses (29-1111) | | | | |
| | | 1,920 | 27.0% | \$29.16 |
| Associate's | 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. Key Skills: Active Listening, Reading Comprehension, Critical Thinking, Instructing, Speaking, Time Management | | | |
| Physical Therapists (29-1123) | | | | |
| | | 105 | 31.4% | \$30.12 |
| Master's | Assess, plan, organize, and participate in rehabilitative programs that improve mobility, relieve pain, increase strength, and decrease or prevent deformity of patients suffering from disease or injury. Key Skills: Active Listening, Instructing, Time Management, Speaking, Critical Thinking | | | |
| Dental Hygienists (29-2021) | | | | |
| | | 155 | 35.1% | \$26.62* |
| Associate's | 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. Key Skills: Active Listening, Speaking, Reading Comprehension, Active Learning, Time Management | | | |
| Cardiovascular Technologists and Technicians (29-2031) | | | | |
| | | 165 | 39.8% | \$21.47* |
| Associate's | Conduct tests on pulmonary or cardiovascular systems of patients for diagnostic purposes. May conduct or assist in electrocardiograms, cardiac catheterizations, pulmonary-functions, lung capacity, and similar tests. Includes vascular technologists. Key Skills: Active Listening, Reading Comprehension, Instruction, Active Learning, Speaking | | | |
| Medical Records and Health Information Technicians (29-2071) | | | | |
| | | 145 | 41.1% | \$16.86 |
| Associate's | Compile, process, and maintain medical records of hospital and clinic patients in a manner consistent with medical, administrative, ethical, legal, and regulatory requirements of the health care system. Process, maintain, compile, and report patient information for health requirements and standards. Key Skills: Active Listening, Reading Comprehension, Time Management, Speaking, Writing | | | |
| Service Occupations | | | | |
| Recreation Workers (39-9032) | | | | |
| | | 400 | 21.5% | \$10.46* |
| Bachelor's | Conduct recreation activities with groups in public, private, or volunteer agencies or recreation facilities. Organize and promote activities, such as arts and crafts, sports, games, music, dramatics, social recreation, camping, and hobbies, taking into account the needs and interests of individual members. Key Skills: Service Orientation, Active Listening, Speaking, Instruction, Judgment and Decision Making | | | |

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| Professional Occupations | | | | |
| | Purchasing Agents, Except Wholesale, Retail and Farm (13-1023) | 90 | 18.5% | \$25.52 |
| Work Exp. in Related Occupation | Purchase machinery, equipment, tools, parts, supplies, or services necessary for the operation of an establishment. Purchase raw or semi-finished materials for manufacturing. Key Skills: Speaking, Active Listening, Critical Thinking, Judgment & Decision Making, Reading Comprehension | | | |
| | Cost Estimators (13-1051) | 70 | 20.0% | \$32.82 |
| Work Exp. in Related Occupation | Prepare cost estimates for product manufacturing, construction projects, or services to aid management in bidding on or determining price of product or service. May specialize according to particular service performed or type of product manufactured. Key Skills: Active Listening, Reading Comprehension, Mathematics, Time Management, Writing | | | |
| | Preschool Teachers, Except Special Education (25-2011) | 165 | 21.2% | \$13.17 |
| Post-Secondary Vocational Training | Instruct children (normally up to 5 years of age) in activities designed to promote social, physical, and intellectual growth needed for primary school in preschool, day care center, or other child development facility. May be required to hold State certification. Key Skills: Active Listening, Instructing, Speaking, Reading Comprehension, Learning Strategies | | | |
| | Self-Enrichment Education Teachers (25-3021) | 240 | 49.0% | \$15.67 |
| Work Exp. in Related Occupation | Teach or instruct courses other than those that normally lead to an occupational objective or degree. Courses may include self-improvement, nonvocational, and nonacademic subjects. Teaching may or may not take place in a traditional educational institution. Key Skills: Instructing, Speaking, Active Listening, Learning Strategies, Social Perceptiveness | | | |
| Health Care Occupations | | | | |
| | Licensed Practical & Licensed Vocational Nurses (29-2061) | 150 | 16.3% | \$20.03 |
| Post-Secondary Vocational Training | 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. Key Skills: Active Listening, Reading Comprehension, Time Management, Writing, Active Learning | | | |
| | Medical Transcriptionists (31-9094) | 100 | 20.1% | \$15.62 |
| Post-Secondary Vocational Training | Use transcribing machines with headset and foot pedal to listen to recordings by physicians and other healthcare professionals dictating a variety of medical reports, such as emergency room visits, diagnostic imaging studies, operations, chart reviews, and final summaries. Transcribe dictated reports and translate medical jargon and abbreviations into their expanded forms. Key Skills: Active Listening, Reading Comprehension, Time Management, Writing, Active Learning | | | |
| Service Occupations | | | | |
| | Police and Sheriff's Patrol Officers (33-3051) | 135 | 20.8% | \$22.95* |
| Long-Term OJT | Maintain order, enforce laws and ordinances, and protect life and property in an assigned patrol district. Perform combination of following duties: patrol a specific area on foot or in a vehicle; direct traffic; issue traffic summonses; investigate accidents; apprehend and arrest suspects, or serve legal processes of courts. Key Skills: Judgment & Decision Making, Active Listening, Critical Thinking, Writing, Speaking | | | |
| | Hairdressers, Hairstylists, and Cosmetologists (39-5012) | 110 | 10.6% | \$11.10* |
| Post-Secondary Vocational Training | Provide beauty services, such as shampooing, cutting, coloring, and styling hair, and massaging and treating scalp. May also apply makeup, dress wigs, perform hair removal, and provide nail and skin care services. Key Skills: Active Listening, Speaking, Time Management, Coordination, Social Perceptiveness | | | |
| Sales Occupations | | | | |
| | First-Line Supervisors/Managers of Retail Sales Workers (41-1011) | 425 | 16.8% | \$18.92 |
| Work Exp. in Related Occupation | Directly supervise sales workers in a retail establishment or department. Duties may include management functions, such as purchasing, budgeting, accounting, and personnel work, in addition to supervisory duties. Key Skills: Management of Personnel Resources, Active Listening, Service Orientation, Time Management, Instructing | | | |
| | First-Line Supervisors of Non-Retail Sales Workers (41-1012) | 150 | 19.3% | \$39.33 |
| Work Exp. in Related Occupation | Directly supervise and coordinate activities of sales workers other than retail sales workers. May perform duties, such as budgeting, accounting, and personnel work, in addition to supervisory duties. Key Skills: Speaking, Time Management, Active Listening, Reading Comprehension, Social Perceptiveness | | | |

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| Administrative Support Occupation | | | | |
| Real Estate Sales Agents (41-9022) | | 160 | 29.3% | \$22.92 |
| Post-Secondary Vocational Training | Rent, buy, or sell property for clients. Perform duties, such as study property listings, interview prospective clients, accompany clients to property site, discuss conditions of sale, and draw up real estate contracts. Includes agents who represent buyer. Key Skills: Active Listening, Time Management, Negotiation, Speaking, Reading Comprehension | | | |
| Construction and Repair Occupations | | | | |
| Legal Secretaries (43-6012) | | 95 | 15.0% | \$17.60 |
| Post-Secondary Vocational Training | Perform secretarial duties utilizing legal terminology, procedures, and documents. Prepare legal papers and correspondence, such as summonses, complaints, motions, and subpoenas. May also assist with legal research. Key Skills: Reading Comprehension, Active Listening, Time Management, Writing, Active Learning | | | |
| Carpenters (47-2031) | | 665 | 20.2% | \$21.48 |
| Long-Term OJT | Construct, erect, install, or repair structures and fixtures made of wood, such as concrete forms; building frameworks, including partitions, joists, studding, and rafters; wood stairways, window and door frames, and hardwood floors. May also install cabinets, siding, drywall and batt or roll insulation. Includes brattice builders who build doors or brattices (ventilation walls or partitions) in underground passageways to control the proper circulation of air through the passageways and to the working places. Key Skills: Mathematics, Time Management, Active Listening, Critical Thinking, Judgment & Decision Making | | | |
| Electricians (47-2111) | | 200 | 21.8% | \$29.95 |
| Long-Term OJT | 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 Key Skills: Installation, Active Listening, Reading Comprehension, Troubleshooting, Equipment Selection | | | |
| Plumbers, Pipefitters, and Steamfitters (47-2152) | | 105 | 14.8% | \$27.58 |
| Long-Term OJT | 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. Key Skills: Active Listening, Mathematics, Repairing, Troubleshooting, Complex Problem Solving | | | |
| Structural Iron and Steel Workers (47-2221) | | 65 | 17.7% | \$21.59 |
| Long-Term OJT | Raise, place, and unite iron or steel girders, columns, and other structural members to form completed structures or structural frameworks. May erect metal storage tanks and assemble prefabricated metal buildings. Key Skills: Installation, Equipment Selection, Operation and Control | | | |
| Automotive Service Technicians and Mechanics (49-3023) | | 125 | 13.8% | \$21.73 |
| Post-Secondary Vocational Training | Diagnose, adjust, repair, or overhaul automotive vehicles. Key Skills: Troubleshooting, Repairing, Equipment Selection, Active Listening, Critical Thinking | | | |
| Production Occupations | | | | |
| Supervisors of Production & Operating Workers (51-1011) | | 175 | 12.6% | \$30.71 |
| Work Exp. in Related Occupation | 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. Key Skills: Active Listening, Management of Personnel Resources, Reading Comprehension, Instruction | | | |
| Machinists (51-4041) | | 80 | 10.7% | \$19.21* |
| Long-Term OJT | 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. Key Skills: Operation & Control, Operation Monitoring, Mathematics, Equipment Selection, Troubleshooting | | | |
| Welders, Cutters, Solderers, and Brazers (51-4121) | | 70 | 15.0% | \$24.09 |
| Long-Term OJT | Use hand-welding, flame-cutting, hand soldering, or brazing equipment to weld or join metal components or to fill holes, indentations, or seams of fabricated metal products. Key Skills: Operation & Control, Equipment Selection, Equipment Maintenance, Mathematics, Operation Monitoring | | | |

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