



Key Demand Occupations – 2012 – Southeast Michigan

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)		2,285	11.4%	\$49.79
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, 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. Includes owners and managers who head small business establishments whose duties are primarily managerial. Key Skills: Active Listening, Management of Personnel Resources, Time Management, Decision Making, Monitoring			
Sales Managers (11-2022)		1,270	26.0%	\$48.84
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 clients. Key Skills: Active Listening, Speaking, Mathematics, Time Management, Service Orientation			
Computer and Information Systems Managers (11-3021)		1,185	27.1%	\$49.11
Work Exp. + Bachelor's	Plan, direct, or coordinate activities in such fields as electronic data processing, information systems, systems analysis, and computer programming. Key Skills: Reading Comprehension, Critical Thinking, Active Listening, Judgment & Decision Making, Active Learning			
Financial Managers (11-3031)		925	13.0%	\$48.51
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: Mgt. of Financial Resources, Mathematics, Critical Thinking, Decision Making, Reading Comprehension			
Medical and Health Services Managers (11-9111)		690	21.4%	\$38.88
Work Exp. + Bachelor's	Plan, direct, or coordinate medicine and health services in hospitals, clinics, managed care organizations, public health agencies, or similar organizations. Key Skills: Active Listening, Reading Comprehension, Critical Thinking, Monitoring, Speaking			
Professional Occupations				
Management Analysts (13-1111)		1,450	19.3%	\$38.42*
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			
Accountants and Auditors (13-2011)		3,390	14.5%	\$29.22
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			
Personal Financial Advisors (13-2052)		655	29.4%	\$52.87
Bachelor's	Advise clients on financial plans utilizing knowledge of tax and investment strategies, securities, insurance, pension plans, and real estate. Duties include assessing clients' assets, liabilities, cash flow, insurance coverage, tax status, and financial objectives to establish investment strategies. Key Skills: Active Listening, Speaking, Mathematics, Judgment & Decision Making, Service Orientation			
Loan Officers (13-2072)		920	31.1%	\$25.48
Bachelor's	Evaluate, authorize, or recommend approval of commercial, real estate, or credit loans. Advise borrowers on financial status and methods of payments. Includes mortgage loan officers and agents, collection analysts, loan servicing officers, and loan underwriters. Key Skills: Active Listening, Time Management, Reading Comprehension, Persuasion, Speaking			
Computer Software Engineers, Applications (15-1031)		2,125	36.0%	\$35.73*
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			

OJT = On-the-job Training

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

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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	1,595	20.0%	\$20.81
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	3,840	30.3%	\$34.51*
Network Systems and Data Communication Analysts (15-1081)				
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	835	49.7%	\$28.43
Commercial and Industrial Designers (27-1021)				
Bachelor's	Develop and design manufactured products, such as cars, home appliances, and children's toys. Combine artistic talent with research on product use, marketing, and materials to create the most functional and appealing product design. Key Skills: Time Management, Active Listening, Reading Comprehension, Mathematics, Judgment and Decision Making	560	16.4%	\$34.53
Public Relations Specialists (27-3031)				
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	815	24.0%	\$27.45
Health Care Occupations				
Physician Assistants (29-1071)				
Bachelor's	Provide healthcare services typically performed by a physician, under the supervision of a physician. Conduct complete physicals, provide treatment, and counsel patients. May, in some cases, prescribe medication. Must graduate from an accredited education program for physician assistants. Key Skills: Active Listening, Active Learning, Speaking, Reading Comprehension, Critical Thinking	550	36.1%	\$33.70
Registered Nurses (29-1111)				
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	6,085	16.0%	\$29.29
Physical Therapists (29-1123)				
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	440	22.6%	\$32.81
Dental Hygienists (29-2021)				
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	1,070	23.4%	\$28.24
Medical Records and Health Information Technicians (29-2071)				
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	715	26.1%	\$15.39

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Professional Occupations				
Cost Estimators (13-1051)				
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	560	12.9%	\$32.42
Preschool Teachers, Except Special Education (25-2011)				
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	835	25.2%	\$13.75
Self-Enrichment Education Teachers (25-3021)				
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	615	34.6%	\$16.12
Health Care Occupations				
Licensed Practical & Licensed Vocational Nurses (29-2061)				
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, Critical Thinking	670	10.5%	\$19.78
Service Occupations				
Fire Fighters (33-2011)				
Long-Term OJT	Control and extinguish fires or respond to emergency situations where life, property, or the environment is at risk. Duties may include fire prevention, emergency medical service, hazardous material response, search and rescue, and disaster management. Key Skills: Active Listening, Coordination, Equipment Selection, Critical Thinking, Equipment Maintenance	500	12.9%	\$19.84
Police and Sheriff's Patrol Officers (33-3051)				
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	1,665	16.1%	\$24.54
Cooks, Restaurant (35-2014)				
Long-Term OJT	Prepare, season, and cook soups, meats, vegetables, desserts, or other foodstuffs in restaurants. May order supplies, keep records and accounts, price items on menu, or plan menu. Key Skills: Active Listening, Reading Comprehension, Speaking, Active Learning, Instructing	2,120	18.3%	\$10.30
Fitness Trainers and Aerobics Instructors (39-9031)				
Post-Secondary Vocational Training	Instruct or coach groups or individuals in exercise activities and the fundamentals of sports. Demonstrate techniques and methods of participation. Observe participants and inform them of corrective measures necessary to improve their skills. Those required to hold teaching degrees should be reported in the appropriate teaching category. Key Skills: Instructing, Speaking, Coordination, Learning Strategies, Monitoring	335	19.9%	\$14.06
Sales Occupations				
First-Line Supervisors/Managers of Non-Retail Workers (41-1012)				
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	1,035	11.8%	\$38.89
Construction and Repair Occupations				
Managers of Construction Trades & Extraction Workers (47-1011)				
Work Exp. in Related Occupation	Directly supervise and coordinate activities of construction or extraction workers. Key Skills: Coordination, Management of Personnel Resources, Time Management, Active Listening, Instructing	1,050	12.6%	\$33.96

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Carpenters (47-2031)				
		2,535	17.5%	\$22.08
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)				
		2,670	19.7%	\$28.95
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 streetlights, intercom systems, or electrical control systems. Key Skills: Installation, Active Listening, Reading Comprehension, Troubleshooting, Equipment Selection			
Plumbers, Pipefitters, and Steamfitters (47-2152)				
		995	12.0%	\$24.87
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)				
		345	15.0%	\$25.73
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			
Managers of Mechanics, Installers, and Repairers (49-1011)				
		755	11.8%	\$30.54
Work Exp. in Related Occupation	Supervise and coordinate the activities of mechanics, installers, and repairers. Sample of job titles: Maintenance Supervisor, Maintenance Foreman, Production Crew Supervisor, Maintenance Manager, Crew Leader, Maintenance Planner, Airport Skilled Maintenance Supervisor, Electrical Supervisor, Facilities Manager Key Skills: Mgt. of Personnel Resources, Reading Comprehension, Active Listening, Equipment Selection, Installation			
Automotive Service Technicians and Mechanics (49-3023)				
		700	7.4%	\$21.20
Post-Secondary Vocational Training	Diagnose, adjust, repair, or overhaul automotive vehicles. Key Skills: Troubleshooting, Repairing, Equipment Selection, Active Learning, Critical Thinking			
Bus and Truck Mechanics and Diesel Engine Specialists (49-3031)				
		340	10.7%	\$21.59
Post-Secondary Vocational Training	Diagnose, adjust, repair, or overhaul trucks, buses, and all types of diesel engines. Includes mechanics working primarily with automobile diesel engines. Key Skills: Equipment Maintenance, Troubleshooting, Repairing, Reading Comprehension, Installation			
HVAC Mechanics and Installers (49-9021)				
		355	24.7%	\$22.40
Long-Term OJT	Install or repair heating, central air conditioning, or refrigeration systems, including oil burners, hot-air furnaces, and heating stoves. Key Skills: Troubleshooting, Repairing, Active Listening, Equipment Maintenance, Critical Thinking			
Production Occupations				
Supervisors of Production & Operating Workers (51-1011)				
		975	6.9%	\$29.24
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, Instructing			
Machinists (51-4041)				
		980	10.8%	\$20.36
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 and Control, Operation Monitoring, Mathematics, Equipment Selection, Troubleshooting			

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