



Key Demand Occupations – 2012 – East Central 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)		50	14.5%	\$40.93
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, Monitoring.			
Financial Managers (11-3031)		15	24.6%	\$33.39
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			
Industrial Production Managers (11-3051)		10	12.7%	\$41.53
Bachelor's	Plan, direct, or coordinate the work activities and resources necessary for manufacturing products in accordance with cost, quality, and quantity specifications. Key Skills: Active Listening, Judgment and Decision Making, Critical Thinking, Reading Comprehension, Coordination			
Construction Managers (11-9021)		5	4.7%	\$38.31
Bachelor's	Plan, direct, coordinate, or budget, 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, and implementation. Includes specialized construction fields, such as carpentry or plumbing. Includes general superintendents, project managers, and constructors who manage, coordinate, and supervise the construction process. Key Skills: Reading Comprehension, Critical Thinking, Coordination, Instruction, Active Listening			
Medical and Health Services Managers (11-9111)		20	24.7%	\$30.74
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				
Training and Development Specialists (13-1073)		15	37.5%	\$21.36
Bachelor's	Conduct training and development programs for employees. Key Skills: Active Listening, Speaking, Time Management, Reading Comprehension, Writing			
Accountants and Auditors (13-2011)		40	20.6%	\$23.84
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			
Loan Officers (13-2072)		10	16.5%	\$25.36
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)		10	54.2%	\$31.61
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			
Mechanical Engineers (17-2141)		10	17.2%	\$26.03
Bachelor's	Perform engineering duties in planning and designing tools, engines, machines, and other mechanically functioning equipment. Oversee installation, operation, maintenance, and repair of such equipment as centralized heat, gas, water, and steam systems. Key Skills: Mathematics, Complex Problem Solving, Critical Thinking, Reading Comprehension, Science			

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

Page 1 of 4

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Medical and Public Health Social Workers (21-1022)				
		10	19.0%	\$18.56
Master's	Provide persons, families, or vulnerable populations with the psychosocial support needed to cope with chronic, acute, or terminal illnesses, such as Alzheimer's, cancer, or AIDS. Services include advising family care givers, providing patient education and counseling, and making necessary referrals for other social services. Key Skills: Active Listening, Writing, Reading Comprehension, Social Perceptiveness, Speaking			
Public Relations Specialists (27-3031)				
		15	16.5%	\$19.14
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				
Physician Assistants (29-1071)				
		15	53.3%	\$33.37
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			
Registered Nurses (29-1111)				
		200	27.0%	\$24.12
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			
Respiratory Therapists (29-1126)				
		10	45.0%	\$20.33
Associate's	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. Key Skills: Active Listening, Instruction, Reading Comprehension, Critical Thinking, Monitoring			
Dental Hygienists (29-2021)				
		25	22.6%	\$25.99
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			
Radiological Technologists and Technicians (29-2034)				
		10	16.9%	\$19.48
Associate's	Take X-rays and CAT scans or administer nonradioactive materials into patient's blood stream for diagnostic purposes. Includes technologists who specialize in other modalities, such as computed tomography and magnetic resonance. Includes workers whose primary duties are to demonstrate portions of the human body on X-ray film or fluoroscopic screen. Key Skills: Active Listening, Speaking, Reading Comprehension, Time Management, Critical Thinking			
Medical Records and Health Information Technicians (29-2071)				
		20	40.5%	\$14.13
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)				
		20	22.0%	\$10.18
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			
Sales Occupations				
Securities, Commodities & Financial Sales Agents (41-3031)				
		10	17.6%	\$31.77
Bachelor's	Buy and sell securities in investment and trading firms, or call upon businesses and individuals to sell financial services. Provide financial services, such as loan, tax, and securities counseling. May advise securities customers about such things as stocks, bonds, and market conditions. Key Skills: Service Orientation, Active Listening, Speaking, Instruction, Judgment and Decision Making			

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Page 2 of 4

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Professional Occupations				
	Purchasing Agents, Except Wholesale, Retail and Farm (13-1023)	10	18.2%	\$23.81
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)	15	15.2%	\$24.71
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			
Health Care Occupations				
	Emergency Medical Technicians and Paramedics (29-2041)	20	15.2%	\$12.12
Post-Secondary Vocational Training	Assess injuries, administer emergency medical care, and extricate trapped individuals. Transport injured or sick persons to medical facilities. Key Skills: Active Listening, Critical Thinking, Speaking, Coordination, Equipment Maintenance			
	Licensed Practical & Licensed Vocational Nurses (29-2061)	50	15.6%	\$16.27
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			
Service Occupations				
	Fire Fighters (33-2011)	25	15.0%	\$15.39
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			
	Police and Sheriff's Patrol Officers (33-3051)	30	17.3%	\$19.63
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			
	First-Line Supervisors of Food Preparation Workers (35-1012)	55	10.4%	\$10.84
Work Exp. in Related Occupation	Supervise workers engaged in preparing and serving food. Key Skills: Speaking, Active Listening, Time Management, Instruction, Reading Comprehension			
	Cooks, Restaurant (35-2014)	35	10.1%	\$7.86
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			
	Managers of Housekeeping and Janitorial Workers (37-1011)	15	20.2%	\$16.68
Work Exp. in Related Occupation	Supervise work activities of cleaning personnel in hotels, hospitals, offices, and other establishments. Key Skills: Reading Comprehension, Active Listening, Instruction, Monitoring, Active Learning			
	Hairdressers, Hairstylists, and Cosmetologists (39-5012)	85	10.3%	\$11.81
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			

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Page 3 of 4

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Construction and Repair Occupations				
	Managers of Construction Trades & Extraction Workers (47-1011)	30	10.1%	\$25.02
Work Exp. in Related Occupation	Directly supervise and coordinate activities of construction or extraction workers. Key Skills: Coordination, Management of Personnel Resources, Time Management, Speaking, Active Listening			
	Carpenters (47-2031)	105	9.8%	\$14.79
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)	15	20.2%	\$22.73
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			
	Managers of Mechanics, Installers, and Repairers (49-1011)	20	16.3%	\$24.28
Work Exp. in Related Occupation	Supervise and coordinate the activities of mechanics, installers, and repairers. Exclude team or work leaders. Key Skills: Management of Personnel Resources, Reading Comprehension, Active Listening, Equipment Selection, Installation			
	Automotive Body and Related Repairers (49-3021)	10	8.0%	\$17.26
Long-Term OJT	Repair and refinish automotive vehicle bodies and straighten vehicle frames. Key Skills: Equipment Selection, Repairing, Troubleshooting, Installation, Complex Problem Solving			
	Automotive Service Technicians and Mechanics (49-3023)	25	9.0%	\$17.23
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)	30	10.5%	\$22.57
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, Monitoring			
	Machinists (51-4041)	20	9.0%	\$14.45
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)	15	11.8%	\$14.39
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			
Transportation Occupations				
	Managers of Transportation, Material-Moving Machine and Vehicle Operators (53-1031)	10	12.3%	\$20.75
Work Exp. in Related Occupation	Directly supervise and coordinate activities of transportation and material-moving machine and vehicle operators and helpers. Key Skills: Active Listening, Speaking, Time Management, Management of Personal Resources, Coordination			

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Page 4 of 4

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