

Career Profiles

High Demand Occupations



ADVANCED MANUFACTURING

OCCUPATION OUTLOOK IN MICHIGAN, 2023

WHAT OPPORTUNITIES ARE AVAILABLE?

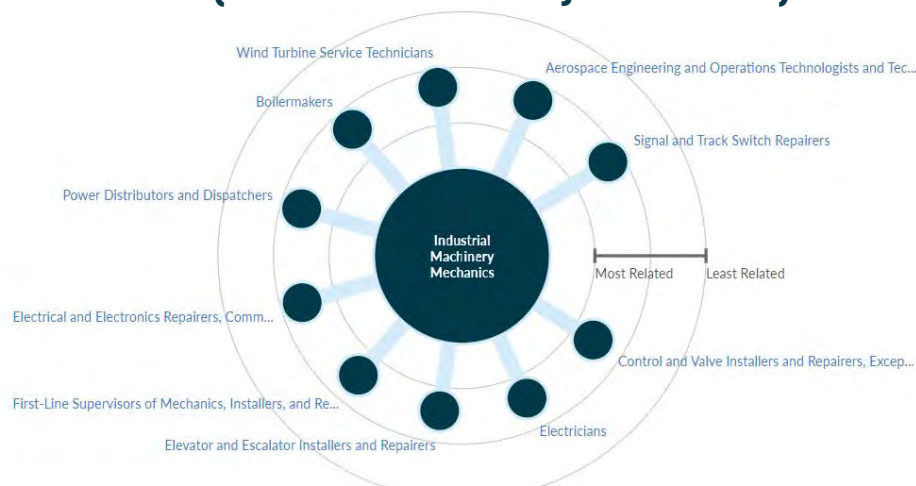
Advanced manufacturing jobs range from assembly and production, to skilled trades and technicians, to designers and engineers and more. Occupations encompassed in advanced manufacturing include First-line Supervisors of Production and Operating Workers, Industrial Machinery Mechanics, Electrical and Electronics Engineering Technologists and Technicians, Industrial Engineering Technologists and Technicians, and Tool and Die Makers, along with Maintenance and Repair Workers, General.

**112,243
WORKERS
EMPLOYED**

HOW MUCH COULD I EARN?

	ENTRY	MEDIAN	EXPERIENCED
Electrical and Electronic Engineering Technologists and Technicians	\$21.78	\$29.82	\$48.13
Industrial Engineering Technologists and Technicians	\$17.87	\$29.02	\$37.39
Industrial Machinery Mechanics	\$17.97	\$28.42	\$37.24
Maintenance and Repair Workers, General	\$13.54	\$18.23	\$29.10
First-Line Supervisors of Production and Operating Workers	\$18.35	\$29.61	\$47.95
Tool and Die Makers	\$18.31	\$29.28	\$37.18

RELATED CAREER PROFILES (Industrial Machinery Mechanics)



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WHAT EDUCATION & SKILLS WILL I NEED?

Advanced manufacturing occupations typically require a high school diploma or equivalent for entry. Technical roles like Tool and Die Makers or engineering technicians require an associate degree or postsecondary non-degree award coupled with long-term on-the-job training. Comparatively, 45.6% of postings require a high school education, and an HVAC certification is a highly demanded qualification.

WHAT AREAS OF STUDY SHOULD I CONSIDER?

In 2021, there were 5,473 advanced manufacturing-related educational program completions, with the Electrical, Electronic and Communications Engineering Technology educational program having the highest completion number. Other programs that had high completion numbers are the Industrial Mechanics and Maintenance Technology program and Industrial Production Technologies/Technicians, Other program.

WHAT SKILLS SHOULD I DEVELOP?

- Plumbing
- HVAC
- Machinery
- Preventive Maintenance
- Carpentry
- Hand Tools
- Painting
- Housekeeping
- Hydraulics
- Field Service Management
- Communications
- Troubleshooting (Problem Solving)
- Operations
- Management
- Customer Service

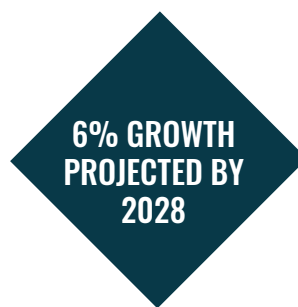
WHAT QUALIFICATIONS SHOULD I PURSUE?

- Valid Driver's License
- HVAC Certification
- Commercial Driver's License (CDL)
- Automotive Service Excellence (ASE) Certification
- EPA 608 Technician Certification
- Forklift Certification
- Pesticide Applicator License
- Chauffeur License

WHAT ELSE SHOULD I KNOW?

General Maintenance and Repair Worker positions are often available to entry-level workers. Working in maintenance can help provide hands-on learning experiences to build the skills necessary when seeking credentials to become an industrial machinery mechanic or tool and die maker. Salary approximations for advanced manufacturing occupations can range from \$28,000 to over \$101,000.

IS THIS FIELD EXPECTED TO GROW?



HOW DO I GET STARTED?

For more information on how to start your career in advanced manufacturing visit www.winintelligence.org.



BUSINESS AND FINANCE

OCCUPATION OUTLOOK IN MICHIGAN, 2023

WHAT OPPORTUNITIES ARE AVAILABLE?

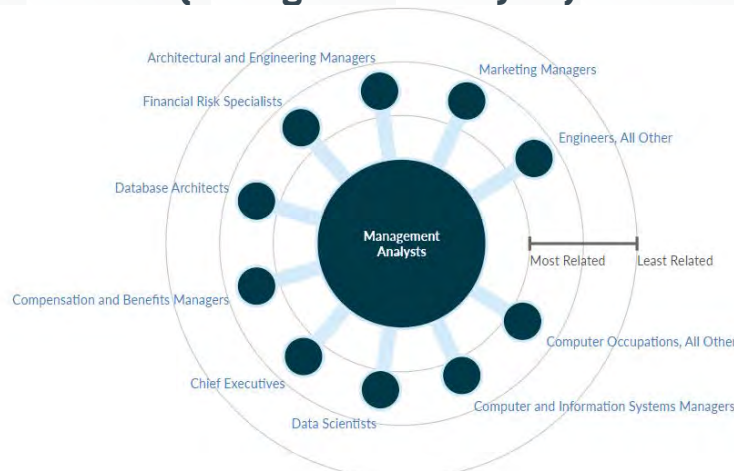
Jobs utilizing business and finance skills can be found in nearly every type of firm. These workers need strong mathematical and accounting abilities along with project management and planning skills. Accountants, Sales Representatives, Management and Financial Analysts, and Insurance Sales Agents are the occupations included here, but many occupations benefit from similar skills and experience.

130,770
WORKERS
EMPLOYED

HOW MUCH COULD I EARN?

	ENTRY	MEDIAN	EXPERIENCED
Management Analysts	\$22.87	\$38.54	\$63.64
Accountants and Auditors	\$22.90	\$34.66	\$58.51
Financial and Investment Analysts	\$23.71	\$37.85	\$59.47
Insurance Sales Agents	\$14.19	\$23.47	\$48.87
Sales Representatives, Wholesale and Manufacturing, Except	\$14.71	\$29.86	\$60.22

RELATED CAREER PROFILES (Management Analysts)



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WHAT EDUCATION & SKILLS WILL I NEED?

Three of the occupations analyzed here typically require a bachelor's degree for entry, and two require a high school diploma and on-the-job training according to BLS data. In addition, 71.8% of postings require a college education, and a Master of Business Administration (MBA) is an extremely common posted credential. Of the jobs posting experience requirements, nearly all require five years or fewer.

WHAT AREAS OF STUDY SHOULD I CONSIDER?

The most common program held by business and finance workers is a business administration and management degree, followed by accounting and business/ commerce, general. These programs focus on widely applicable transferable skills across these and other occupations. The total number of completions in the region are reflected in the chart below.

WHAT SKILLS SHOULD I DEVELOP?

- Accounting
- Finance
- Marketing
- Auditing
- Selling Techniques
- Sales Prospecting
- Customer Relationship Management
- Financial Statements
- Financial Analysis
- Outside Sales
- Sales
- Communications
- Management
- Customer Service
- Microsoft Excel

WHAT QUALIFICATIONS SHOULD I PURSUE?

- Valid Driver's License
- Certified Public Accountant
- Master Of Business Administration (MBA)
- Property And Casualty Insurance License
- Certified Internal Auditor
- Life And Health Insurance License
- Certified Information System Auditor (CISA)
- Insurance License

WHAT ELSE SHOULD I KNOW?

Starting in positions such as an insurance sales agent, for example, requires only a high school diploma. Entry-level positions help build customer service skills and financial experience. To grow your career, consider later seeking the credentials to become an accountant or financial analyst, or the experience needed for a lucrative position as a sales representative.

IS THIS FIELD EXPECTED TO GROW?



HOW DO I GET STARTED?

For more information on how to start your career in business and finance visit www.winintelligence.org.



CNC MACHINE OPERATORS

OCCUPATION OUTLOOK IN MICHIGAN, 2023

WHAT OPPORTUNITIES ARE AVAILABLE?

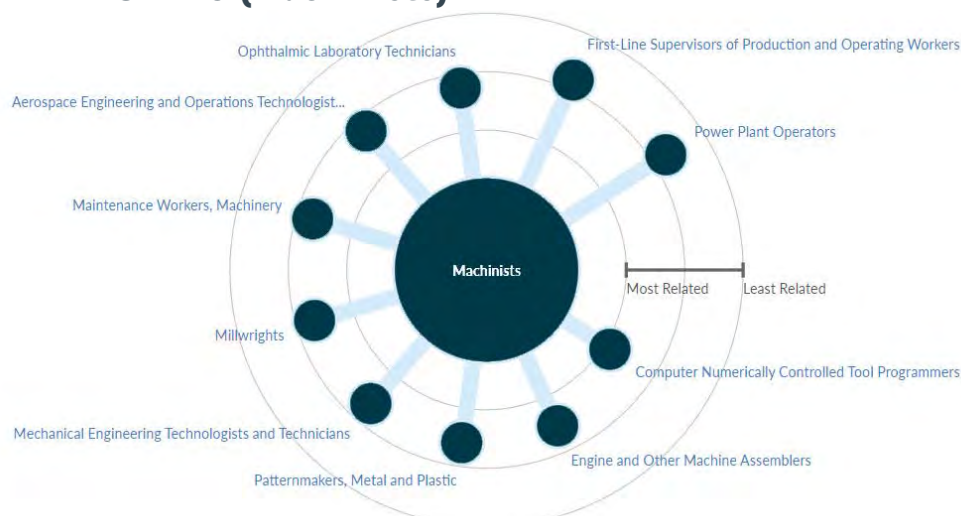
CNC Machinists program tools to manufacture a broad array of materials and parts. A high level of precision and technical proficiency is needed to be successful. These positions are often specialized based on the kind of machinery and materials you will be working with, as well as the amount of programming required. There are five high demand machining occupations included here, but many roles will require a combination of skills.

**38,000
WORKERS
EMPLOYED**

HOW MUCH COULD I EARN?

	ENTRY	MEDIAN	EXPERIENCED
Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic	\$14.16	\$18.73	\$28.73
Milling and Planing Machine Setters, Operators, and Tenders, Metal and Plastic	\$14.24	\$18.61	\$29.12
Machinists	\$14.51	\$22.53	\$30.10
Computer Numerically Controlled Tool Operators	\$14.50	\$19.44	\$29.34
Computer Numerically Controlled Tool Programmers	\$19.74	\$29.22	\$36.86

RELATED CAREER PROFILES (Machinists)



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WHAT EDUCATION & SKILLS WILL I NEED?

These occupations typically prefer applicants with a high school diploma or short-term postsecondary credential along with medium to long-term on the job training for entry. About 50 percent of postings list a preference for a high school diploma, and nearly a quarter prefer applicants with between three and five years of experience.

WHAT AREAS OF STUDY SHOULD I CONSIDER?

Formal training programs tend to focus on programming and technical skills. Those with the most completions include Computer Programming, General, CNC Machinist Technology, Data Processing Technology, and Machine Tool Technology. The total number of completions for these programs in the region are reflected in the chart below.

WHAT SKILLS SHOULD I DEVELOP?

- Machining
- Computer Numerical Control (CNC)
- Lathes
- Tooling
- CNC Machining
- Operations
- Mathematics
- Communications
- Detail Oriented
- Troubleshooting (Problem Solving)

WHAT QUALIFICATIONS SHOULD I PURSUE?

- Valid Driver's License
- CDL Class A License
- Commercial Driver's License (CDL)
- Security Clearance
- Tanker Endorsement

WHAT ELSE SHOULD I KNOW?

CNC Machinists typically work in a manufacturing and production environment, but hiring and staffing for entry-level roles is often managed through staffing companies. The region's top posting employers for highly skilled CNC Machining workers are below.

- Orchid Orthopedics
- Aerotek
- Orchid Orthopedic Solutions
- Randstad
- Sentech Services
- Parker Hannifin
- Amcomm Telecommunications
- Taldeco

IS THIS FIELD EXPECTED TO GROW?



HOW DO I GET STARTED?

For more information on how to start your career in CNC Machining visit www.intelligence.org.



CONSTRUCTION TRADES

OCCUPATION OUTLOOK IN MICHIGAN, 2023

WHAT OPPORTUNITIES ARE AVAILABLE?

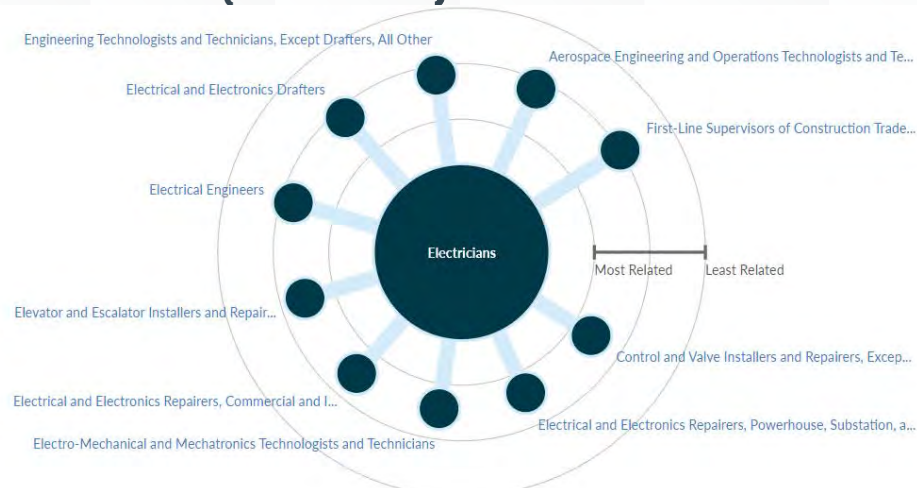
Construction Trades occupations are commonly associated with skilled trades, engineering, management, and planning. Construction employers are slowly adopting online job search methods to augment more traditional pathways, so online job postings may not capture the complete picture of demand for workers. Construction trades detailed here include Cost Estimators, Carpenters, and Electricians.

**46,378
WORKERS
EMPLOYED**

HOW MUCH COULD I EARN?

	ENTRY	MEDIAN	EXPERIENCED
Cost Estimators	\$18.25	\$30.50	\$49.29
Carpenters	\$16.67	\$23.09	\$36.15
Electricians	\$17.51	\$29.77	\$44.79

RELATED CAREER PROFILES (Electricians)



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WHAT EDUCATION & SKILLS WILL I NEED?

Construction trades occupations typically require a high school diploma or equivalent coupled with an apprenticeship for entry. Some positions may require a bachelor's degree and moderate-term on-the-job training. Regarding online job ads, 23.0 percent of postings require a high school education and high-demand certifications are listed below.

WHAT AREAS OF STUDY SHOULD I CONSIDER?

In 2021, construction trades-related educational programs had 5,203 completions in Michigan. Business Administration and Management, General program, which can provide contractors with valuable commerce skills, reported the highest number of completions. Fields such as Mechanical Engineering and Business/Commerce, General can also be valuable to construction trades workers, and report high numbers of completions.

WHAT SKILLS SHOULD I DEVELOP?

- Carpentry
- Construction
- Electrical Wiring
- Cost Estimation
- Subcontracting
- Communications
- Customer Service
- Troubleshooting (Problem Solving)
- Management
- Operations

WHAT QUALIFICATIONS SHOULD I PURSUE?

- Journeyman Electrician
- Commercial Driver's License (CDL)
- 10-Hour OSHA General Industry Card
- National Apprenticeship Certificate
- Security Clearance
- Certified Cost Professional (CCP)

WHAT ELSE SHOULD I KNOW?

Top entry level jobs require a high school diploma or equivalent with an apprenticeship. You may start your career as an Electrician, or possibly as a Carpenter. Salary approximations for construction trades occupations can range from \$35,000 to over \$103,000.

IS THIS FIELD EXPECTED TO GROW?



HOW DO I GET STARTED?

For more information on how to start your career in construction visit www.winintelligence.org.



CULINARY ARTS

OCCUPATION OUTLOOK IN MICHIGAN, 2023

WHAT OPPORTUNITIES ARE AVAILABLE?

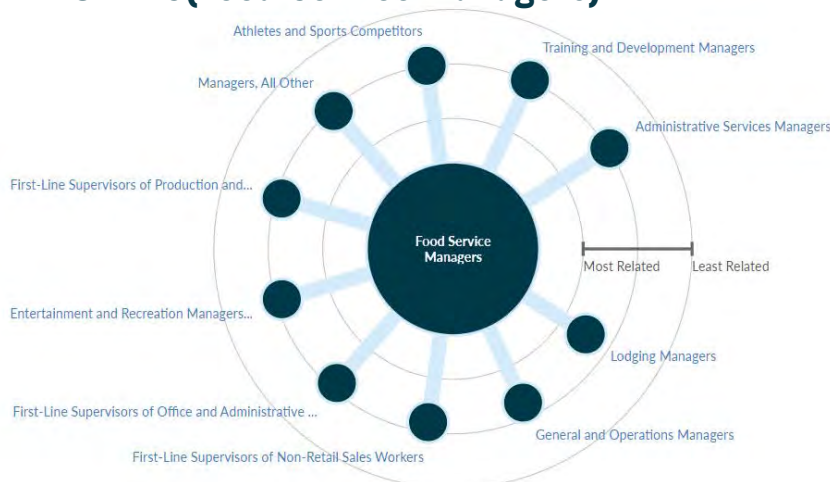
Culinary Arts students learn the fundamentals of cookery and with additional training and experience, become able to create gourmet foods and artistic presentations. Many culinary occupations carry skillsets transferable across hospitality industries. Occupations encompassed in culinary arts include First-line Supervisors of Food Preparation and Serving Workers, Food Service Managers, Chefs and Head Cooks, Bakers, and Food Batchmakers.

55,592
WORKERS
EMPLOYED

HOW MUCH COULD I EARN?

	ENTRY	MEDIAN	EXPERIENCED
Food Service Managers	\$18.28	\$28.86	\$45.01
Chefs and Head Cooks	\$17.48	\$23.32	\$38.25
First-Line Supervisors of Food Preparation and Serving	\$13.69	\$17.57	\$24.25
Bakers	\$10.93	\$13.78	\$17.97
Food Batchmakers	\$11.57	\$17.47	\$28.27

RELATED CAREER PROFILES(Food Service Managers)



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WHAT EDUCATION & SKILLS WILL I NEED?

Many culinary arts occupations require no formal educational credential or a high school diploma or equivalent for entry. Other occupation requirements include moderate-term to long-term on-the-job training. Comparatively, 36.9 percent of postings require a high school education, and a ServSafe Certification is a highly demanded qualification.

WHAT AREAS OF STUDY SHOULD I CONSIDER?

In 2021, there were 1,911 culinary arts program completions, with the Culinary Arts/Chef Training educational program having the highest completion number. Other programs with high completion numbers are the Baking and Pastry Arts/Baker/Pastry Chef program and Cooking and Related Culinary Arts, General program.

WHAT SKILLS SHOULD I DEVELOP?

- Restaurant Operation
- Food Safety And Sanitation
- Restaurant Management
- Food Services
- Food Preparation
- Customer Service
- Communications
- Leadership
- Management
- Operations

WHAT QUALIFICATIONS SHOULD I PURSUE?

- ServSafe Certification
- Food Handler's Card
- Food Safety Certification
- Certified Dietary Manager (CDM)
- Registered Dietitian (RD/RDN)
- Food Protection Manager Certification

WHAT ELSE SHOULD I KNOW?

Top entry level jobs require a high school diploma or equivalent with no training. You may start your career as a Baker, or possibly as a Food Service Manager. Salary approximations for culinary arts occupations can range from \$24,000 to over \$94,000.

IS THIS FIELD EXPECTED TO GROW?



HOW DO I GET STARTED?

For more information on how to start your career in culinary arts visit www.winintelligence.org.



CYBERSECURITY

OCCUPATION OUTLOOK IN MICHIGAN, 2023

WHAT OPPORTUNITIES ARE AVAILABLE?

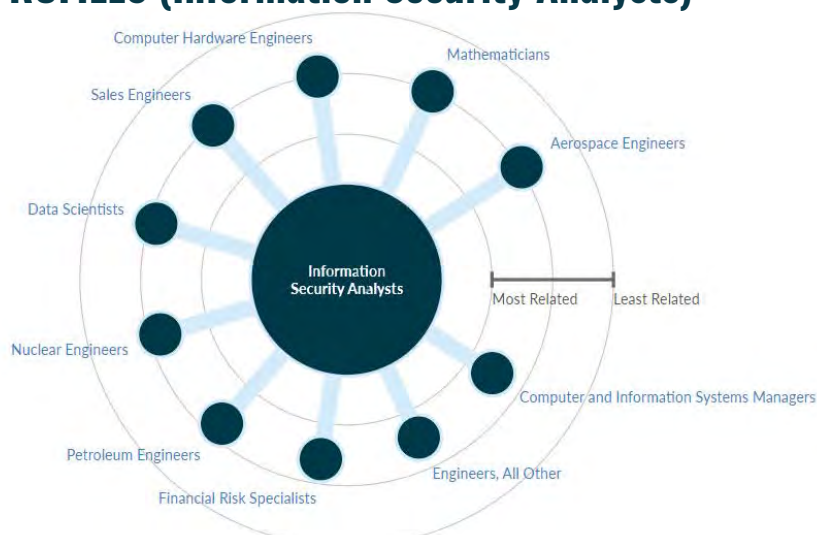
Cybersecurity specialists help build and maintain robust networks to keep data safe, private, and accurate. Information Security Analysts, Computer Programmers, and Database Administrators are the occupations included here, but a wide range of jobs can launch a cybersecurity career. Additionally, a growing number of positions both in and out of information technology roles require familiarity with cybersecurity skills.

**6,300
WORKERS
EMPLOYED**

HOW MUCH COULD I EARN?

	ENTRY	MEDIAN	EXPERIENCED
Information Security Analysts	\$22.51	\$47.11	\$63.65
Database Administrators	\$22.98	\$38.01	\$60.95
Computer Programmers	\$18.93	\$37.34	\$61.96

RELATED CAREER PROFILES (Information Security Analysts)



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WHAT EDUCATION & SKILLS WILL I NEED?

The three occupations analyzed here all typically require a bachelor's degree for entry. About half of online job postings specifically state a requirement for a college degree, and another 14.8 percent prefer a master's degree.

WHAT AREAS OF STUDY SHOULD I CONSIDER?

With the importance placed on certifications, work experience, and evolving practical skills, many fundamental degrees in computer science can help prepare you for a cybersecurity career. Computer and Information Sciences, Computer Programming, Computer Engineering, and Management Information Systems (MIS) have the greatest numbers of local completions. The total number of completions in these and related programs within the region are reflected in the chart below.

WHAT SKILLS SHOULD I DEVELOP?

- SQL
- Cyber Security
- Python
- Auditing
- Agile Methodology
- Communications
- Management
- Leadership
- Problem Solving
- Operations

WHAT QUALIFICATIONS SHOULD I PURSUE?

- Certified Information Systems Security Professional
- Certified Information System Auditor (CISA)
- Certified Information Security Manager
- GIAC Certifications
- CompTIA Security+

WHAT ELSE SHOULD I KNOW?

Among these occupations, Computer Programmers are most likely to be open to entry-level applicants. Information Security Analysts typically prefer workers with at least three years of experience. Certifications are important for workers at all levels, so continuous professional development is key to keeping up with new cybersecurity threats.

IS THIS FIELD EXPECTED TO GROW?



HOW DO I GET STARTED?

For more information on how to start your career in cybersecurity visit www.winintelligence.org.



HEALTH CARE TECHNICIANS

OCCUPATION OUTLOOK IN MICHIGAN, 2023

WHAT OPPORTUNITIES ARE AVAILABLE?

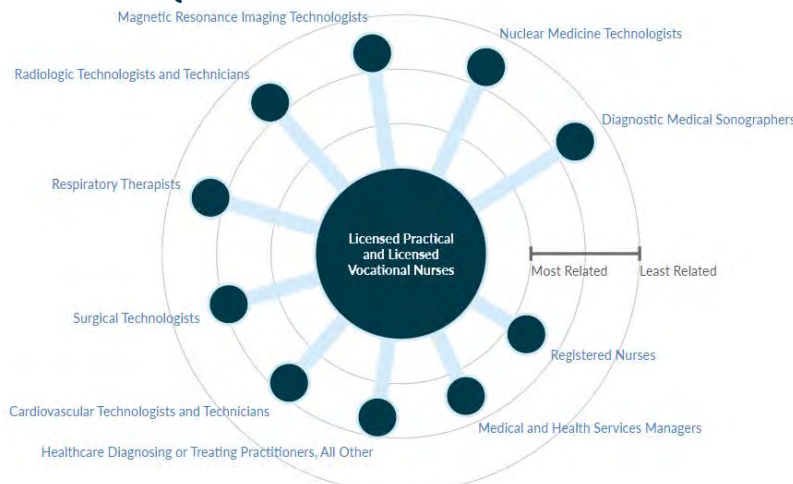
Health care technicians perform specialized tasks to aid physicians and pharmacists and ensure every patient receives excellent care. Responsibilities sometimes include administrative duties, such as scheduling appointments, maintaining medical records, billing, and coding information for insurance. Depending on the specialty you choose, you will also perform clinical tasks like taking and recording vital signs and medical histories, preparing patients for examination, drawing blood, preparing or administering medications or taking x rays and CAT scans.

57,594
WORKERS
EMPLOYED

HOW MUCH COULD I EARN?

	ENTRY	MEDIAN	EXPERIENCED
Radiologic Technologists and Technicians	\$22.61	\$29.12	\$37.48
Pharmacy Technicians	\$13.54	\$17.59	\$22.53
Licensed Practical and Licensed Vocational Nurses	\$22.20	\$27.07	\$29.45
Medical Assistants	\$14.01	\$17.85	\$21.06

RELATED CAREER PROFILES (Licensed Practical and Licensed Vocational Nurses)



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WHAT EDUCATION & SKILLS WILL I NEED?

All of these occupations require a high school diploma along with some additional training; this may include on-the-job training, a short-term postsecondary credential, or an associate degree depending on the position.

WHAT AREAS OF STUDY SHOULD I CONSIDER?

Medical and Clinical Assistant programs have the highest number of local completions for these occupations. Other areas of study are closely aligned with your goal occupation; Licensed Practical/Vocational Nurse Training, Pharmacy Technician, and Medical Radiologic Technology/ Science are also among popular programs. Completions in these and similar programs within the region are shown below compared to job openings.

WHAT SKILLS SHOULD I DEVELOP?

- Nursing
- Medical Assistance
- Vital Signs
- Medical Prescription
- Medical Records
- Communications
- Customer Service
- Clerical Works
- Leadership
- Operations

WHAT QUALIFICATIONS SHOULD I PURSUE?

- Licensed Practical Nurse (LPN)
- Basic Life Support (BLS) Certification
- Registered Nurse (RN)
- Certified Medical Assistant (CMA)
- Certified Pharmacy Technician

WHAT ELSE SHOULD I KNOW?

All of these occupations are open to entry level applicants with the correct training and credentials. LPNs are the most likely to specify candidates with 0-2 years of experience. Here are some skills and qualifications distinguishing the most experienced workers:

- Licensed Practical Nurse (LPN)
- Basic Life Support (BLS) Certification
- Certified Medical Assistant (CMA)
- Registered Nurse (RN)
- Cardiopulmonary Resuscitation (CPR) Certification

IS THIS FIELD EXPECTED TO GROW?

**5% GROWTH
ROJECTED
BY 2028**

2021 Program
Completions

5,074

2022 Job
Openings

6,794



HOW DO I GET STARTED?

For more information on how to start your career as a health care technician visit www.winintelligence.org.



HOME HEALTH & PERSONAL CARE AIDES

OCCUPATION OUTLOOK IN MICHIGAN, 2023

WHAT OPPORTUNITIES ARE AVAILABLE?

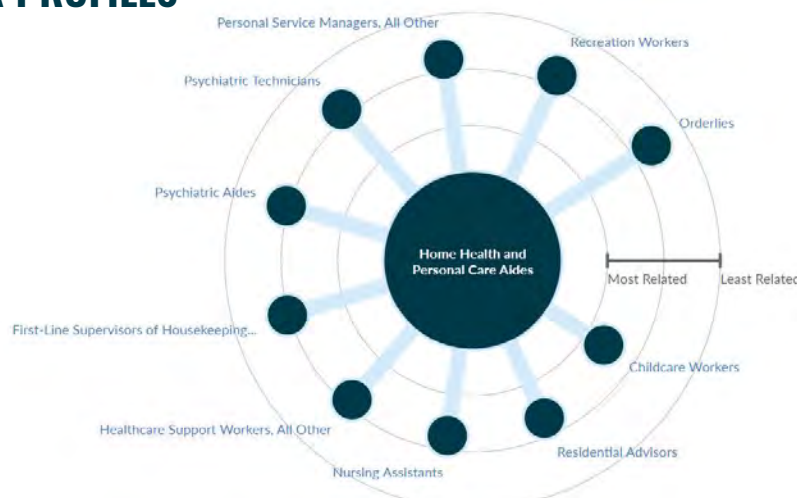
Home Health & Personal Care Aides perform a variety of functions in support of everyday health and hygiene for individuals with disabilities or illness. This may include changing bandages, dressing wounds, or administering medication. In addition to health-related support, they may also provide assistance with daily living activities, such as feeding, bathing, or restroom use. Occasionally, this help may also include meal prep and light housekeeping for affected individuals.

**87,081
WORKERS
EMPLOYED**

HOW MUCH COULD I EARN?

	ENTRY	MEDIAN	EXPERIENCED
Home Health and Personal Care Aides	\$10.92	\$13.53	\$16.84

RELATED CAREER PROFILES



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WHAT EDUCATION & SKILLS WILL I NEED?

These occupations typically require a high school diploma along with some on-the-job training. Some employers may also require a short-term, postsecondary credential, or an associate degree depending on the position.

WHAT AREAS OF STUDY SHOULD I CONSIDER?

Health Professions and Related Clinical Sciences, Other programs have the highest number of local completions for these occupations. Other areas of study are closely aligned with your goal occupation; Nursing Assistant/Aide and Patient Care Assistant/Aide and Health/Medical Preparatory Programs, Other are also among popular programs. Completions in these and similar programs within the region are shown below compared to job openings.

WHAT SKILLS SHOULD I DEVELOP?

- Caregiving
- Meal Planning And Preparation
- Companionship
- Housekeeping
- Personal Care
- Communications
- Compassion
- Lifting Ability
- Customer Service
- Management

WHAT QUALIFICATIONS SHOULD I PURSUE?

- Valid Driver's License
- Certified Nursing Assistant (CNA)
- Cardiopulmonary Resuscitation (CPR) Certification
- First Aid Certification
- Registered Nurse (RN)

WHAT ELSE SHOULD I KNOW?

Most of these occupations are open to entry-level applicants who would like to build caregiving skills. These skills may help launch a health care career or determine whether you have an interest in pursuing technician or nursing credentials. Obtaining a CNA, for example, can potentially be a step to a career as a registered nurse or medical assistant.

IS THIS FIELD EXPECTED TO GROW?

**13% GROWTH
PROJECTED BY
2028**

+ 2021 Program
Completions

+ 2022 Job
Openings

15,670

1,221



HOW DO I GET STARTED?

For more information on how to start your career as a medical assistant visit www.winintelligence.org.



INFORMATION TECHNOLOGY (IT)

OCCUPATION OUTLOOK IN MICHIGAN, 2023

WHAT OPPORTUNITIES ARE AVAILABLE?

The Information Technology field is quickly growing in Southeast Michigan, and these workers play a major role in technical, professional, software, and systems integration services across many industries. Occupations encompassed in information technology include Computer User Support Specialists, Computer Systems Analysts, Web Developers, and Network and Computer Systems Administrators.

**47,135
WORKERS
EMPLOYED**

HOW MUCH COULD I EARN?

	ENTRY	MEDIAN	EXPERIENCED
Computer Systems Analysts	\$29.67	\$47.76	\$62.99
Computer User Support Specialists	\$14.43	\$23.12	\$36.92
Network and Computer Systems Administrators	\$24.92	\$37.65	\$58.15
Web Developers	\$17.93	\$37.24	\$50.63

RELATED CAREER PROFILES (Computer User Support Specialists)



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WHAT EDUCATION & SKILLS WILL I NEED?

Most information technology occupations require at least some college coursework, with most preferring a bachelor's degree. Most job postings specifying education, or 50 percent of all ads, indicate a college degree. Another 13 percent prefer an associate degree, and certificates like the Microsoft Certified Professional are also in high demand.

WHAT AREAS OF STUDY SHOULD I CONSIDER?

In 2021, there were 25,449 information technology-related educational program completions, with Computer and Information Sciences, General having the highest completion number. Computer Science and Computer and Information Systems Security/Auditing/Information Assurance also had a high number of completions, suggesting that many workers develop their most specialized skills on the job.

WHAT SKILLS SHOULD I DEVELOP?

- Computer Science
- Technical Support
- Help Desk Support
- Operating Systems
- Agile Methodology
- Communications
- Troubleshooting (Problem Solving)
- Customer Service
- Management
- Problem Solving

WHAT QUALIFICATIONS SHOULD I PURSUE?

- Valid Driver's License
- CompTIA A+
- Microsoft Certified Professional
- CompTIA Network+
- Cisco Certified Network Associate

WHAT ELSE SHOULD I KNOW?

You may start your career as a Computer User Support Specialist, or possibly as a Web Developer, as both occupations require less than a college degree and provide valuable experience. Salary approximations for IT occupations can range from \$21,000 to over \$120,000 with education and experience.

IS THIS FIELD EXPECTED TO GROW?



HOW DO I GET STARTED?

For more information on how to start your career as a medical assistant visit www.winintelligence.org.



MEDICAL ASSISTANT

OCCUPATION OUTLOOK IN MICHIGAN, 2023

WHAT OPPORTUNITIES ARE AVAILABLE?

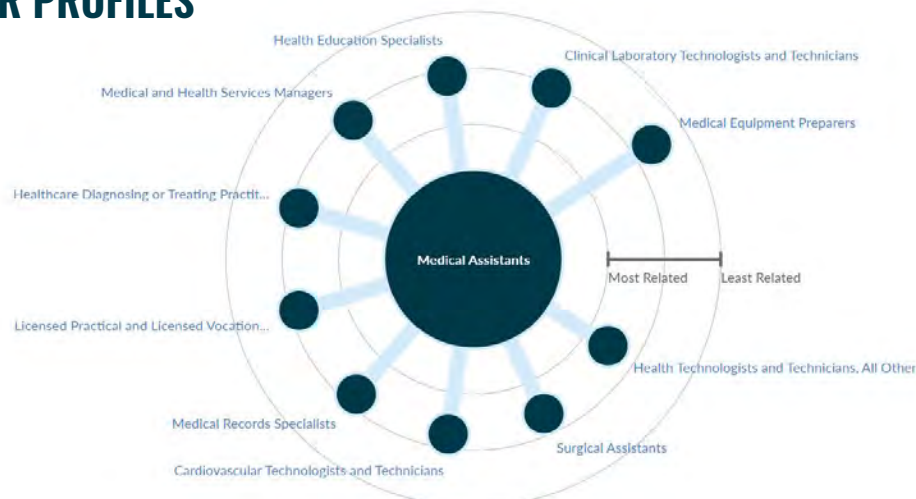
Medical Assistants perform specialized tasks to aid physicians and pharmacists and ensure every patient receives excellent care. Responsibilities sometimes include administrative duties, such as scheduling appointments, maintaining medical records, billing, and coding information for insurance. Depending on the specialty you choose, you will also perform clinical tasks like taking and recording vital signs and medical histories, preparing patients for examination, drawing blood, preparing or administering medications or taking x rays and CAT scans.

57,800
WORKERS
EMPLOYED

HOW MUCH COULD I EARN?

	ENTRY	MEDIAN	EXPERIENCED
Medical Assistants	\$14.01	\$17.85	\$21.06

RELATED CAREER PROFILES



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WHAT EDUCATION & SKILLS WILL I NEED?

All of these occupations require a high school diploma along with some additional training; this may include on-the-job training, a short-term postsecondary credential, or an associate degree depending on the position.

WHAT AREAS OF STUDY SHOULD I CONSIDER?

Medical and Clinical Assistant programs have the highest number of local completions for these occupations. Other areas of study are closely aligned with your goal occupation; Licensed Practical/Vocational Nurse Training, Pharmacy Technician, and Medical Radiologic Technology/ Science are also among popular programs. Completions in these and similar programs within the region are shown below compared to job openings.

WHAT SKILLS SHOULD I DEVELOP?

- Nursing
- Medical Assistance
- Basic Life Support
- Cardiopulmonary Resuscitation (CPR)
- Health Sciences
- Customer Service
- Construction
- Innovation
- Operations
- Clerical Works

WHAT QUALIFICATIONS SHOULD I PURSUE?

- Basic Life Support (BLS) Certification
- Certified Medical Assistant (CMA)
- Licensed Practical Nurse (LPN)
- American Medical Technologists (AMT) Certification
- Certified Clinical Medical Assistant (CCMA)

WHAT ELSE SHOULD I KNOW?

A majority of job postings for Medical Assistants are open to entry level applicants with the correct training and credentials. Here are some skills and qualifications distinguishing the most experienced workers:

- Certified Medical Assistant (CMA)
- Basic Life Support (BLS) Certification
- American Medical Technologists (AMT) Certification
- Registered Medical Assistant (RMA)
- Emergency Medical Technician (EMT)

IS THIS FIELD EXPECTED TO GROW?



HOW DO I GET STARTED?

For more information on how to start your career as a medical assistant visit www.winintelligence.org.





NURSING ASSISTANTS

OCCUPATION OUTLOOK IN MICHIGAN, 2023

WHAT OPPORTUNITIES ARE AVAILABLE?

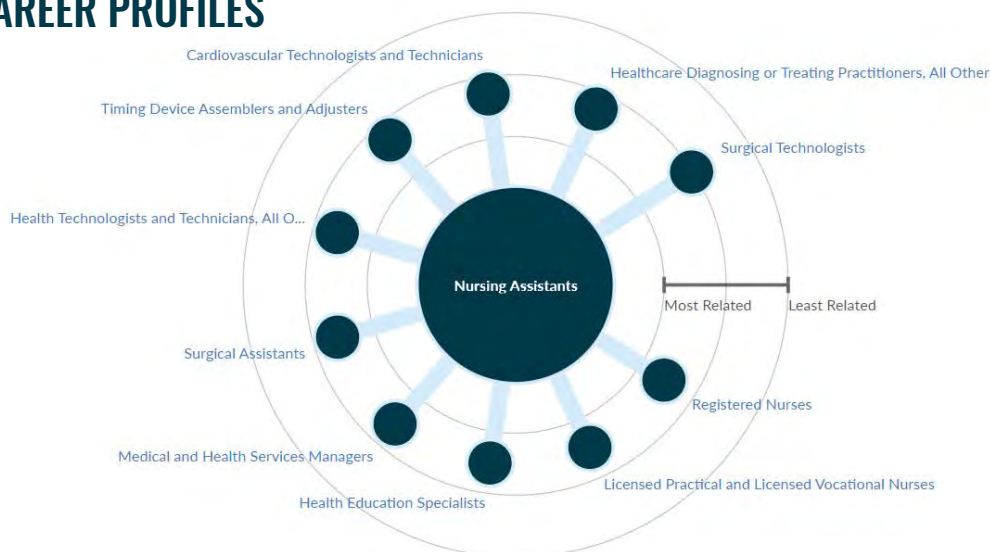
Nursing assistants provide or assist with basic care, often under the direction of licensed nursing staff. Much of their duties involve hygienic care such as monitoring of health status, feeding, bathing, dressing, grooming, toileting, or ambulation of patients in a health or nursing facility. They may also administer medication and other health-related tasks. These positions require excellent communication and keen observational skills to build relationships and best respond to a patient's needs. These positions are not expected to grow as much as similar healthcare-related careers, such as home health and personal care aides.

**41,000
WORKERS
EMPLOYED**

HOW MUCH COULD I EARN?

	ENTRY	MEDIAN	EXPERIENCED
Nursing Assistants	\$13.89	\$17.11	\$18.31

RELATED CAREER PROFILES



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WHAT EDUCATION & SKILLS WILL I NEED?

Nursing Assistants typically require a high school diploma with some on the job training or a certificate for entry. About 15 percent of online job postings state a requirement for an associate degree.

WHAT AREAS OF STUDY SHOULD I CONSIDER?

Areas of study for this occupation tend to focus on either nursing or clinical science skills. Health Professions and Related Clinical Sciences programs have the greatest number of completions, followed by Nursing Assistant/Aide and Patient Care Assistant/Aide and Practical Nursing, Vocational Nursing and Nursing Assistants, Other. Completions in these and similar programs within the region are shown below compared to job openings.

WHAT SKILLS SHOULD I DEVELOP?

- Nursing
- Activities Of Daily Living (ADLs)
- Patient Assistance
- Vital Signs
- Direct Patient Care
- Communications
- Customer Service
- Clerical Works
- Leadership
- Lifting Ability

WHAT QUALIFICATIONS SHOULD I PURSUE?

- Certified Nursing Assistant (CNA)
- Registered Nurse (RN)
- Certified Patient Care Technician (CPCT)
- Basic Life Support (BLS) Certification
- Emergency Medical Technician (EMT)

WHAT ELSE SHOULD I KNOW?

Most of these occupations are open to entry-level applicants who would like to build caregiving skills. These skills may help launch a health care career or determine whether you have an interest in pursuing technician or nursing credentials. Obtaining a CNA, for example, can potentially be a step to a career as a registered nurse or medical assistant.

IS THIS FIELD EXPECTED TO GROW?



HOW DO I GET STARTED?

For more information on how to start your career as a nursing assistant visit www.winintelligence.org.



PHARMACY TECHNICIANS

OCCUPATION OUTLOOK IN MICHIGAN, 2023

WHAT OPPORTUNITIES ARE AVAILABLE?

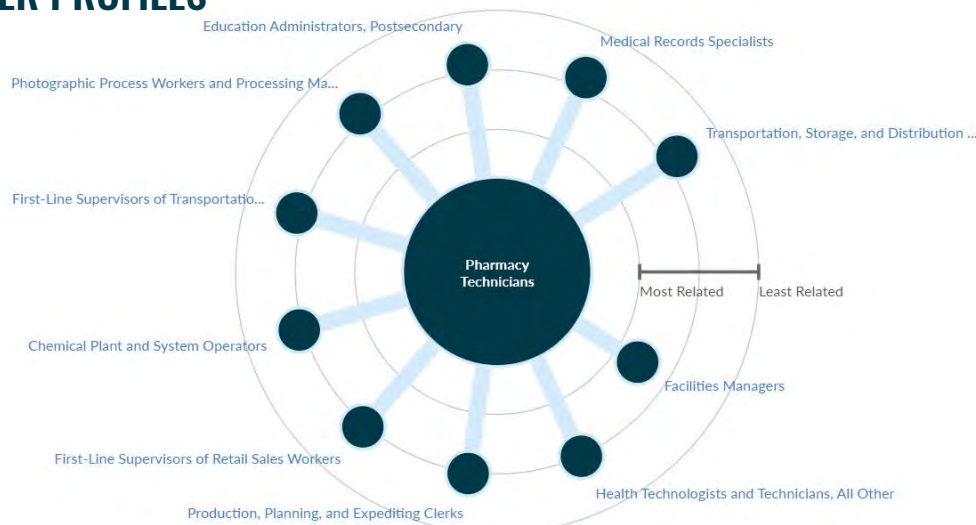
Pharmacy Technicians are the face of operations anytime a person needs a prescription to be filled. Their primary duties are to prepare medications under the direction of a pharmacist, including measuring, mixing and counting. They will also enter prescription information into databases, verify prescription accuracy, and maintain patient profiles. As the first point of contact with the public, customer service skills are very important in addition to a high volume of standard clerical work such as record keeping and maintenance.

**15,600
WORKERS
EMPLOYED**

HOW MUCH COULD I EARN?

	ENTRY	MEDIAN	EXPERIENCED
Pharmacy Technicians	\$13.54	\$17.59	\$22.53

RELATED CAREER PROFILES



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WHAT EDUCATION & SKILLS WILL I NEED?

Pharmacy Technicians typically require a high school diploma, along with moderate on-the-job training or a certificate for entry. About 14 percent of online job postings state a requirement for an associate degree.

WHAT AREAS OF STUDY SHOULD I CONSIDER?

Areas of study tend to focus on either pharmacy technician/assistant or health/medical prep skills. Pharmacy Technician/Assistant programs have the greatest number of completions, followed by Health/Medical Preparatory Programs, Other. Completions in these and similar programs within the region are shown below compared to job openings.

WHAT SKILLS SHOULD I DEVELOP?

- Medical Prescription
- Pharmaceuticals
- Pharmacist Assistance
- Inventory Management
- Cash Register
- Customer Service
- Communications
- Mathematics
- Packaging And Labeling
- Operations

WHAT QUALIFICATIONS SHOULD I PURSUE?

- Certified Pharmacy Technician
- NHA Certified
- Registered Pharmacist (RPh)
- Valid Driver's License
- Pharmacy Intern License

WHAT ELSE SHOULD I KNOW?

Most of these occupations are open to entry-level applicants who would like to work toward a career in healthcare or other non-health clerical positions. Upward mobility may also be available if workers wish to attain the necessary education and credentials toward becoming a Pharmacist.

IS THIS FIELD EXPECTED TO GROW?



HOW DO I GET STARTED?

For more information on how to start your career as a pharmacy technician visit www.winintelligence.org.



REGISTERED NURSES

OCCUPATION OUTLOOK IN MICHIGAN, 2023

WHAT OPPORTUNITIES ARE AVAILABLE?

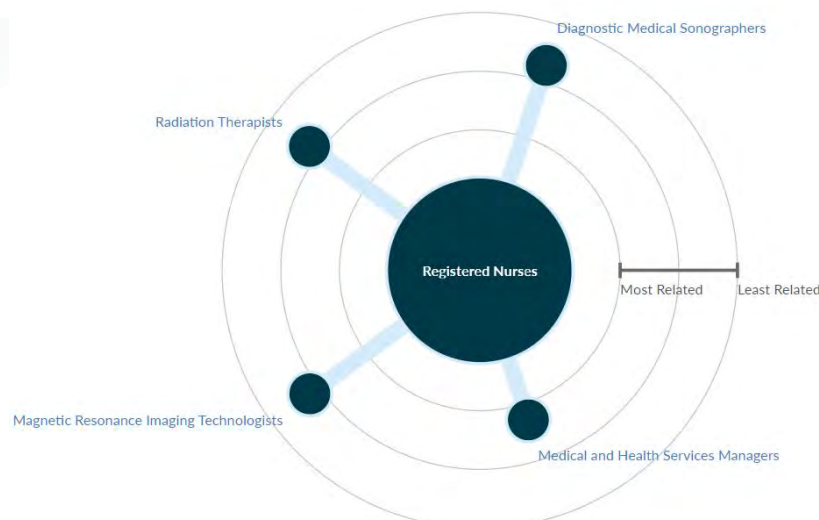
Employment in health care has shown consistent growth, even remaining steady during the recession. Registered Nurses are a consistent top posted occupation both in health care and overall, and require excellent communication and relationship-building skills as well as technical medical knowledge. Nurses work under the direction of physicians and surgeons to assess patient health problems and needs, develop and implement nursing care plans, and maintain medical records. They also advise patients on health maintenance and disease prevention.

**103,000
WORKERS
EMPLOYED**

HOW MUCH COULD I EARN?

	ENTRY	MEDIAN	EXPERIENCED
Registered Nurses	\$28.90	\$36.88	\$47.36

RELATED CAREER PROFILES



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WHAT EDUCATION & SKILLS WILL I NEED?

Registered Nurses most often require a Bachelor's degree for entry, though an Associate degree is nearly as commonly highlighted in job postings. Experience and certifications are also taken into consideration; there are many paths leading to this in-demand occupation.

WHAT AREAS OF STUDY SHOULD I CONSIDER?

Completion of a Registered Nursing Program or a Bachelor's of Science in Nursing (BSN) degree are nearly universally required for entry. Certain specific programs, such as Nursing Research and Clinical Nursing, Family Practice Nursing, or Geriatric or Pediatric Nursing, can also help build skills for working with specific populations. Completions in these and similar programs within the region are shown below compared to job openings.

WHAT SKILLS SHOULD I DEVELOP?

- Nursing
- Nursing Care
- Nursing Process
- Medical Records
- Clinical Practices
- Intensive Care Unit
- Home Health Care
- Clinical Nursing
- Nursing Practices
- Discharge Planning

WHAT QUALIFICATIONS SHOULD I PURSUE?

- Registered Nurse (RN)
- Basic Life Support (BLS) Certification
- Advanced Cardiovascular Life Support (ACLS) Certification
- Licensed Practical Nurse (LPN)
- Cardiopulmonary Resuscitation (CPR) Certification

WHAT ELSE SHOULD I KNOW?

The majority of online job postings for registered nurses are open to entry-level workers, but additional experience is in demand for management and exceptionally high-pressure positions. Skills and qualifications required for experienced positions are shown here.

- Certified Occupational Health Nurse
- Nurse Practitioner
- Certified Hospice and Palliative Nurse
- Case Management
- Acute Care
- Discharge Planning

IS THIS FIELD EXPECTED TO GROW?

**3.1% GROWTH
PROJECTED BY
2028**



HOW DO I GET STARTED?

For more information on how to start your career as a health care technician visit www.winintelligence.org.



WELDERS

OCCUPATION OUTLOOK IN MICHIGAN, 2023

WHAT OPPORTUNITIES ARE AVAILABLE?

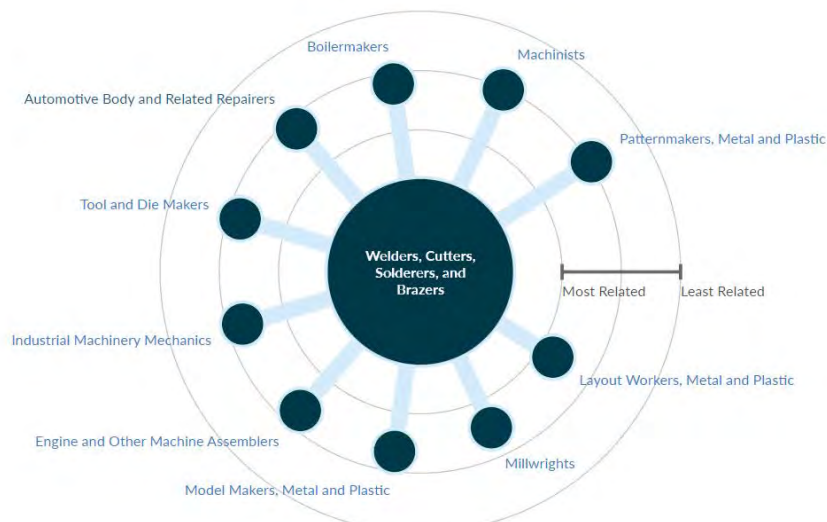
Welding has grown steadily and provides students with opportunities to explore different processes to weld, cut, solder, or braze metals together. Welder programs provide key career skills, safety, and professional knowledge for successful performance. Common processes used by welders include: shielded metal arc, gas metal arc, gas tungsten arc welding, thermal cutting and weld inspection.

**14,862
WORKERS
EMPLOYED**

HOW MUCH COULD I EARN?

	ENTRY	MEDIAN	EXPERIENCED
Welders, Cutters, Solderers, and Brazers	\$14.43	\$18.69	\$29.12

RELATED CAREER PROFILES



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WHAT EDUCATION & SKILLS WILL I NEED?

To become a welder, most employers require a high school diploma or equivalent coupled with moderate-term on-the-job training for entry. Nearly all postings specifying education, or 39.9 percent, require a high school diploma or equivalent, and a certification as Certified Welder is a highly demanded qualification.

WHAT AREAS OF STUDY SHOULD I CONSIDER?

In 2021, there were 491 welder educational program completions, with the Welding Technology/Welder educational program having the highest completion number. Another welding program that had a high completion number is the Welding Engineering Technology/Technician program. Completions in these and similar programs within the region are shown below compared to job openings.

WHAT SKILLS SHOULD I DEVELOP?

- Metal Inert Gas (MIG) Welding
- Welding
- Gas Tungsten Arc Welding
- Fabrication
- Aluminum
- Welding Equipment
- Hand Tools
- Blueprinting
- Grinding Machine
- Welding Symbols

WHAT QUALIFICATIONS SHOULD I PURSUE?

- Valid Driver's License
- Certified Welder
- American Welding Society Certification
- Certified Welding Inspector
- Security Clearance

WHAT ELSE SHOULD I KNOW?

Welding is a hands-on occupation that operates in many fields and has experienced consistent demand. The top posting industries for welders include manufacturing and construction. Salary approximations for welders can range from \$30,000 to over \$60,000 with experience.

IS THIS FIELD EXPECTED TO GROW?



HOW DO I GET STARTED?

For more information on how to start your career as a health care technician visit www.winintelligence.org.

