INTRODUCTION
City of Detroit
Q1 2023

About This Report

The Workforce Intelligence Network for Southeast Michigan (WIN) partnership is a collaboration of Michigan Works! Agencies (MWAs) and community colleges across a 19-county region in Michigan. The counties in the WIN partnership include Clinton, Eaton, Genesee, Hillsdale, Huron, Ingham, Jackson, Lapeer, Lenawee, Livingston, Macomb, Monroe, Oakland, Saint Clair, Sanilac, Shiawassee, Tuscola, Washtenaw, and Wayne, along with the City of Detroit.

The WIN data and research team analyzes job posting data at the occupation level within eleven customized occupation groups built using specific Standard Occupational Classification (SOC) codes to provide more contextualized information. Occupation groups combine data for jobs with similar skillsets, educational attainment, and experience requirements, which provides a more in-depth snapshot of the current labor market when compared to traditional industry data based upon North American Industry Classification System (NAICS) codes. Occupation outlook sections utilize these metrics to identify and display the top in-demand jobs, their entry requirements, and their earning potential.

WIN produces a Quarterly 19-county region report quarterly using data from all eleven occupation groups. A report focused on the city of Detroit is also produced quarterly, focusing on five occupation groups related to Detroit’s labor market. County reports are produced annually and focus on five occupation groups chosen to reflect the labor market specific to the county.

This report highlights labor market information and real-time job posting data for the City of Detroit, including a workforce overview that identifies key components of the area’s labor market such as labor force status, demographic, and commuting data. WIN’s analysis of online job postings, a proxy for employer demand, is a pioneering method for tracking the labor market’s health. This data is used to provide real-time demand and job posting information for both employers and job seekers. This report analyzes the first quarter 2023 labor market information from the City of Detroit for the Business and Finance, Energy, Healthcare, Information Technology (IT), and Skilled Trades occupation groups.

For more information pertaining to the labor market in southeast Michigan, the custom occupation groups within this report, or any other workforce-related data projects, please visit www.WINintelligence.org or contact the data and research team directly at research@WINintelligence.org. For more information about jobseeker resources and our partners, please visit www.micareertraining.org.
Despite a slight decrease in the total labor force during the first quarter of 2023, the unemployment rate is the lowest it has been at 7.4 percent in the last 10 years. The number of unemployed workers saw the greatest improvement, decreasing 19.0 percent from 2022, while the size of the labor force decreased by 1.9 percent from 2022 and the number of employed individuals decreased by 0.2 percent from 2022.

Registered Nurses top the list as the most in-demand occupation, accounting for 3,273 job postings. The healthcare occupation group continues to be heavily demanded in the city of Detroit.
ANNUAL WORKFORCE INDICATORS

Key Findings

During Q1 2023, there were 45,030 job postings, or 8,258 fewer than the 53,288 postings made during Q4 2022 in the city of Detroit. Healthcare, Business and Finance, and Information Technology occupation groups were the highest posting employers in Q1. The top posted job occupations include Registered Nurses, Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products, Software Developers, and Computer Occupation, All Other. More information about in-demand job postings can be found on page 7.

Of the 45,030 unique postings in the city of Detroit during Q1 2023, 18,064 (40.1 percent) required a Bachelor’s degree. An additional 6,118 postings (13.6 percent) required an advanced degree. The high demand for business and finance and information technology roles within the city, drives this high demand for college education.

The city of Detroit has seen consistent labor force patterns since Q1 2022. For Q1 2023, Labor Force participation declined by 550 individuals (0.2 percent) and employment declined by 1,719 workers (0.8 percent) from Q4 2022. On the other hand, unemployment figures showed steady improvement over each quarter from Q1 2023 to Q4 2022 but increased by 1,169 individuals in Q1 2023. Also, the unemployment rate increased by 0.5 percentage points from the previous quarter for an overall Q1 2023 unemployment rate of 7.4 percent. More information regarding this year’s unemployment rate and other labor market indicators can be found on page 4.

Quarterly Labor Market Data

<table>
<thead>
<tr>
<th></th>
<th>1st Quarter 2022</th>
<th>2nd Quarter 2022</th>
<th>3rd Quarter 2022</th>
<th>4th Quarter 2022</th>
<th>1st Quarter 2023</th>
<th>Change from 4th Quarter 2022</th>
<th>Percent Change from 4th Quarter 2022</th>
<th>Change from 1st Quarter 2022</th>
<th>Percent Change from 1st Quarter 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labor Force</td>
<td>255,737</td>
<td>248,165</td>
<td>246,268</td>
<td>244,467</td>
<td>243,917</td>
<td>-550</td>
<td>-0.2%</td>
<td>-11,819</td>
<td>-4.6%</td>
</tr>
<tr>
<td>Employment</td>
<td>227,546</td>
<td>223,315</td>
<td>227,417</td>
<td>227,679</td>
<td>225,960</td>
<td>-1,719</td>
<td>-0.8%</td>
<td>-1,587</td>
<td>-0.7%</td>
</tr>
<tr>
<td>Unemployment</td>
<td>28,190</td>
<td>24,850</td>
<td>18,851</td>
<td>16,789</td>
<td>17,958</td>
<td>1,169</td>
<td>7.0%</td>
<td>-10,233</td>
<td>-36.3%</td>
</tr>
<tr>
<td>Unemployment Rate</td>
<td>11.0%</td>
<td>10.0%</td>
<td>7.7%</td>
<td>6.9%</td>
<td>7.4%</td>
<td>0.5%</td>
<td>na</td>
<td>-3.7%</td>
<td>na</td>
</tr>
</tbody>
</table>

Note: Monthly data averaged by quarter. Data: Bureau of Labor Statistics Data: Lightcast | Analysis: Workforce Intelligence Network
The labor force in the City of Detroit experienced growth year over year from 2015 through 2020 and peaked in 2020 with 262,129 workers. During the pandemic, the labor force marked a 7.7 percent decline to 241,955 but has since increased to 248,659 in 2022 and the decreased again to 243,917 in 2023. Employment showed a similar trend, with growth year after year from 2012 through 2019. The COVID-19 pandemic ushered in a significant drop, with employment dipping 10.2 percent in 2020 over 2019. Employment figures seem to have stabilized in 2023 following the post-pandemic recovery. Meanwhile, the number of unemployed individuals in the City of Detroit declined by 4,212 workers, or 19.0 percent, between 2022 and 2023.

### CENSUS 2021 LABOR FORCE DEMOGRAPHICS

During 2021, there were 272,988 individuals in the labor force, meaning they were either working or looking for work. Employed workers make up 84.7 percent of the city's labor force. The highest unemployment rates in 2021 were seen in those aged 24 years old or younger, with this age cohort, there were 64.5 percent of unemployed individuals identifying as males compared to 54.9 percent of unemployed individuals identifying as female. Overall, males have higher unemployment rate than females, at 17.2 percent and 13.5 percent respectively. Native American job seekers faced the most challenge in securing employment, with an overall unemployment rate of 19.1 percent. This group was followed closely by Black or African American job seekers at 16.7 percent.
According to the Census Bureau 2021 ACS Five Year estimates, the City of Detroit had a population of 645,658 people. The sex of the populace was split almost evenly, with about 52.5 percent of the population identifying as female, and the other 47.5 percent identifying as male. The majority of the population identified as Black or African American (77.9 percent) with the second largest number of individuals identifying as White (12.9 percent). The city's age demographics skew younger than the surrounding region; 26.3 percent of the population was over the age of 54, compared to 34.6 percent under the age of 25, while 39.1 percent of the population fell between the ages of 25-54.
According to the most recent OnTheMap data set from the Census Bureau, Detroit’s 2020 workforce consisted of 174,234 residents. There were 54,339 (31.2 percent) residents also worked in the city, while the remaining 119,896 residents (68.8 percent) traveled outside for work. With 217,513 workers employed in the city during 2020, there were 163,174 (75.0 percent) workers living outside of the city and commuting in. While there is a higher percentage of both inbound and outbound commuters in Detroit than other areas of the WIN regions, Detroit is ultimately a net importer of jobs, with more workers commuting into the area for employment than leaving.

Source: U.S. Census OnTheMap, 2020
Analysis: Workforce Intelligence Network
Registered Nurses are the highest in-demand occupation during Q1, with 3,273 unique online job postings. Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products are the second largest occupation with 1,395 postings. Software Developers (1,344 postings) round out the top three occupations in Q1. Many of these positions require a bachelor’s degree, which is common in over half of the top 20 posted jobs in the city.

Entry-level jobs, which usually require zero to two years of previous experience, account for 24.4 percent of postings in Detroit. Four of the top ten entry level occupations require a bachelor’s degree, while the remaining six require a high school diploma, postsecondary non-degree award, or some college with no degree. Those who enter the workforce with a college degree can expect entry wages nearly double from those without. Registered Nurses were the top posted entry-level job with 1,189 postings requiring zero to two years of experience and a bachelor’s degree.
REAL-TIME DEMAND OVERVIEW

Employer Demand Highlights

Top Posting Employers*

- Henry Ford Health System
- Tenet Healthcare
- Deloitte
- Wayne State University
- PricewaterhouseCoopers
- KPMG
- City Of Detroit
- Ascension
- Accenture
- American Axle & Manufacturing

- Dmc Sinai Grace Hospital
- United States Department of Veterans Affairs
- Actalent
- MGM Resorts International
- Blue Cross Blue Shield
- R1 RCM
- Delaware North
- GPAC
- Comerica
- CBRE

*Employer names are listed as they appear in online job postings.

In-Demand Technical Skills

- Marketing
- Nursing
- Auditing
- Accounting
- Finance
- Computer Science
- Workflow Management
- Data Analysis
- Project Management
- Agile Methodology

In-Demand Foundational Skills

- Communications
- Management
- Leadership
- Customer Service
- Operations
- Sales
- Problem Solving
- Planning
- Writing
- Detail Oriented

Top In-Demand Qualifications

- Registered Nurse (RN)
- Valid Driver’s License
- Basic Life Support (BLS) Certification
- Advanced Cardiovascular Life Support (ACLS) Certification
- Master Of Business Administration (MBA)
- Cardiopulmonary Resuscitation (CPR) Certification
- Licensed Practical Nurse (LPN)
- Board Certified/Board Eligible
- Teaching Certificate
- Project Management Professional Certification
- Certified Public Accountant
- Security Clearance
- Nurse Practitioner (APRN-CNP)
- Commercial Driver’s License (CDL)
- American Red Cross (ARC) Certification
- CDL Class A License
- Certified Nursing Assistant (CNA)
- Basic Cardiac Life Support
- American Registry Of Radiologic Technologists (ARRT) Certified
- Licensed Master Social Worker
Jobs in the Business and Finance occupation group can be found in nearly every type of establishment throughout the city. These workers require strong mathematical and accounting abilities along with project management and planning skills. Workers in this occupation group are in high demand in Detroit.

Business and Finance Education and Experience

The Business and Finance occupation group offers high paying job opportunities for workers. A bachelor's degree is the most in-demand education level in Q1, as noted in 6,297 postings. A master's degree is the second most in-demand education level with 1,491 postings, while 2,365 postings do not specify any education level. Many business and finance occupation postings do not specify a required length of experience. Almost half of the postings list a requirement of two or more years of experience.
The Business and Finance occupation group with the highest number of Q1 postings (1,395) was Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products. This was followed by Managers, All Other (1,089); Sales Managers (803); and Accountants and Auditors, with 695 postings. While most of the top jobs typically require a bachelor’s degree, the highest-posting occupation group, Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products, only requires a high school diploma and offer moderate on-the-job training for those without prior experience.
For job seekers able to obtain the required education, Business and Finance occupations offer lucrative opportunities. The top posted occupation, Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products, offers median hourly wages of $30.49 ($63,419 annually), while Sales Managers have a median hourly wage of $62.29 ($129,563 annually). Additional experience may lead to a role as a Marketing Manager, with median hourly wages at $63.32 ($131,705 annually). Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products provided the lowest median hourly wage for the top posted jobs in this occupation group at $30.49, which is still significantly above the state median of $21.88.

### Wage Overview for Top Posted Business and Finance Jobs in Q1 2023

<table>
<thead>
<tr>
<th>Occupation Code</th>
<th>Occupation Name</th>
<th>10th Percentile Wages</th>
<th>25th Percentile Wages</th>
<th>Median Wages</th>
<th>75th Percentile Wages</th>
<th>90th Percentile Wages</th>
</tr>
</thead>
<tbody>
<tr>
<td>41-4012</td>
<td>Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products</td>
<td>$15.12</td>
<td>$22.87</td>
<td>$30.49</td>
<td>$46.57</td>
<td>$61.07</td>
</tr>
<tr>
<td>11-9199</td>
<td>Managers, All Other</td>
<td>$25.58</td>
<td>$38.36</td>
<td>$54.18</td>
<td>$65.49</td>
<td>$82.07</td>
</tr>
<tr>
<td>11-2022</td>
<td>Sales Managers</td>
<td>$31.90</td>
<td>$47.64</td>
<td>$62.29</td>
<td>$81.60</td>
<td>$116.87</td>
</tr>
<tr>
<td>13-2011</td>
<td>Accountants and Auditors</td>
<td>$25.14</td>
<td>$31.38</td>
<td>$39.75</td>
<td>$50.65</td>
<td>$64.62</td>
</tr>
<tr>
<td>11-1021</td>
<td>General and Operations Managers</td>
<td>$23.13</td>
<td>$30.94</td>
<td>$49.52</td>
<td>$76.83</td>
<td>$106.29</td>
</tr>
<tr>
<td>11-3031</td>
<td>Financial Managers</td>
<td>$39.08</td>
<td>$48.92</td>
<td>$63.28</td>
<td>$80.69</td>
<td>$119.34</td>
</tr>
<tr>
<td>13-1111</td>
<td>Management Analysts</td>
<td>$24.72</td>
<td>$31.64</td>
<td>$40.40</td>
<td>$51.52</td>
<td>$65.32</td>
</tr>
<tr>
<td>11-2021</td>
<td>Marketing Managers</td>
<td>$31.75</td>
<td>$48.64</td>
<td>$63.32</td>
<td>$81.01</td>
<td>$112.09</td>
</tr>
<tr>
<td>13-1082</td>
<td>Project Management Specialists</td>
<td>$25.54</td>
<td>$31.44</td>
<td>$47.33</td>
<td>$60.15</td>
<td>$64.04</td>
</tr>
<tr>
<td>13-1181</td>
<td>Market Research Analysts and Marketing Specialists</td>
<td>$19.12</td>
<td>$24.23</td>
<td>$32.25</td>
<td>$48.22</td>
<td>$61.60</td>
</tr>
</tbody>
</table>

### In-Demand Technical Skills
- Marketing
- Accounting
- Finance
- Auditing
- Selling Techniques

### In-Demand Foundational Skills
- Communications
- Management
- Sales
- Leadership
- Operations

### In-Demand Education Level*
- High School Diploma: 12.7%
- Associate Degree: 5.5%
- Bachelor’s Degree: 65.5%
- Master’s Degree: 15.5%
- Ph.D. or professional Degree: 2.7%

### Top Posting Employers
- Deloitte
- PricewaterhouseCoopers
- KPMG
- Wayne State University
- City Of Detroit
- Comerica
- Henry Ford Health System
- Accenture
- Aston Carter
- Blue Cross Blue Shield

*Not all job postings indicate the required educational attainment level; the percentages indicated may not equal 100 percent.
Energy-related occupations include jobs in engineering, science, mining, and extraction. Workers in this field have a range of skills related to keeping businesses and homes powered. Energy companies employ workers in a variety of occupations, many of which are also included in other WIN occupation groups. Posting data referenced in this section pertains only to job postings from energy-related businesses.

### Energy Education and Experience

The Energy occupation group requires a specialized workforce with specific skills. A bachelor's degree is the most in-demand education level in Q1 with 52.9 percent of 1,846 postings. A master’s degree is the second most in-demand education level with 16.0 percent, while 4.2 percent require a Ph.D. The amount of experience required varies widely from none to over ten years, although a majority require at least two years. Even many energy occupation postings do not request any specific experience.
Most high-demand Energy occupations are engineering positions requiring a bachelor’s degree. General and Operations Managers has emerged as the highest in-demand Energy occupation in Q1 with 617 postings. Other top posted jobs requiring a bachelor’s degree include Electrical Engineers (293 postings), Architectural and Engineering Managers (242 postings) and Civil Engineers (235 postings). Industrial Engineering Technologies and Technicians (199 postings) are only required to hold an associate’s degree without any experience and on the job training.
High demand for engineers and managers in the energy field provides lucrative opportunities for job seekers able to obtain the required educational level. The top posted energy job, General and Operations Managers, offers a median hourly wage of $49.52 ($103,001 annually). Construction- and technician-focused positions generally have shorter educational requirements and pay higher median wages than similar occupations in other industries.

### Wage Overview for Top Posted Energy Jobs in Q1 2023

<table>
<thead>
<tr>
<th>Occupation Code</th>
<th>Occupation Name</th>
<th>10th Percentile Wages</th>
<th>25th Percentile Wages</th>
<th>Median Wages</th>
<th>75th Percentile Wages</th>
<th>90th Percentile Wages</th>
</tr>
</thead>
<tbody>
<tr>
<td>11-1021</td>
<td>General and Operations Managers</td>
<td>$23.13</td>
<td>$30.94</td>
<td>$49.52</td>
<td>$78.83</td>
<td>$106.29</td>
</tr>
<tr>
<td>17-2071</td>
<td>Electrical Engineers</td>
<td>$29.48</td>
<td>$37.33</td>
<td>$46.71</td>
<td>$57.66</td>
<td>$61.84</td>
</tr>
<tr>
<td>11-9041</td>
<td>Architectural and Engineering Managers</td>
<td>$47.26</td>
<td>$59.56</td>
<td>$61.43</td>
<td>$77.27</td>
<td>$97.18</td>
</tr>
<tr>
<td>17-2051</td>
<td>Civil Engineers</td>
<td>$27.64</td>
<td>$28.43</td>
<td>$35.26</td>
<td>$45.42</td>
<td>$57.33</td>
</tr>
<tr>
<td>17-2112</td>
<td>Industrial Engineers</td>
<td>$28.84</td>
<td>$30.47</td>
<td>$40.06</td>
<td>$47.60</td>
<td>$60.19</td>
</tr>
<tr>
<td>17-3026</td>
<td>Industrial Engineering Technologists and Technicians</td>
<td>$17.85</td>
<td>$23.13</td>
<td>$28.30</td>
<td>$30.54</td>
<td>$36.43</td>
</tr>
<tr>
<td>17-2141</td>
<td>Mechanical Engineers</td>
<td>$28.66</td>
<td>$36.44</td>
<td>$46.05</td>
<td>$47.68</td>
<td>$59.89</td>
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<td>11-3051</td>
<td>Industrial Production Managers</td>
<td>$30.75</td>
<td>$42.90</td>
<td>$51.42</td>
<td>$62.00</td>
<td>$79.18</td>
</tr>
<tr>
<td>17-2199</td>
<td>Engineers, All Other</td>
<td>$28.88</td>
<td>$36.87</td>
<td>$47.11</td>
<td>$60.22</td>
<td>$62.12</td>
</tr>
<tr>
<td>17-1011</td>
<td>Architects, Except Landscape and Naval</td>
<td>$28.75</td>
<td>$29.44</td>
<td>$37.11</td>
<td>$47.51</td>
<td>$57.61</td>
</tr>
</tbody>
</table>

### In-Demand Technical Skills
- Construction
- Auditing
- Electrical Engineering
- AutoCAD
- Automation

### In-Demand Foundational Skills
- Communications
- Management
- Leadership
- Operations
- Problem Solving

### In-Demand Certifications
- Professional Engineer (PE) License
- LEED Accredited Professional (AP)
- Engineer in Training
- Commercial Driver's License (CDL)
- Project Management Professional Certification

### In-Demand Education Level*
- High School Diploma: 16.9%
- Associate Degree: 8.8%
- Bachelor's Degree: 52.9%
- Master's Degree: 16.0%
- Ph.D. or Professional Degree: 4.2%

### Top Posting Employers
- Actalent
- American Axle & Manufacturing
- Henry Ford Health System
- GPAC
- DTE Energy
- City Of Detroit
- Wayne State University
- Mercedes-Benz Group
- Deloitte
- CNH Industrial

*Not all job postings indicate the required educational attainment level; the percentages indicated may not equal 100 percent.
The Healthcare occupation group includes jobs related to healthcare support and practitioners. Employment in this group has seen marginal decline since 2018, although healthcare workers remain in high demand to care for Michigan’s aging population. Annually, there are about 3,200 job openings for these positions in Detroit, and this is projected to continue increasing.

### Employment Over Time

<table>
<thead>
<tr>
<th>Year</th>
<th>Employment</th>
</tr>
</thead>
<tbody>
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<td>2013</td>
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<tr>
<td>2014</td>
<td>30,446</td>
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<tr>
<td>2015</td>
<td>30,223</td>
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<tr>
<td>2016</td>
<td>31,179</td>
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<tr>
<td>2017</td>
<td>31,374</td>
</tr>
<tr>
<td>2018</td>
<td>31,414</td>
</tr>
<tr>
<td>2019</td>
<td>31,626</td>
</tr>
<tr>
<td>2020</td>
<td>31,535</td>
</tr>
<tr>
<td>2021</td>
<td>31,285</td>
</tr>
<tr>
<td>2022</td>
<td>31,379</td>
</tr>
<tr>
<td>2023</td>
<td></td>
</tr>
</tbody>
</table>

### Healthcare Workers

- **94 Healthcare Workers**
- **0.3% Increase from 2023**

### Healthcare Education and Experience

The Healthcare occupation group offers many job opportunities for active job seekers at all experience levels. A bachelor’s degree is the most in-demand education level in Q1, with 1,909 postings. An associate degree is the second most in-demand education level (1,305 postings). Many postings from this occupation group do not request any specific experience and education level.
Registered Nurses were the highest in-demand Healthcare occupation with 3,273 total postings, a number significantly higher than all the other occupations. A bachelor’s degree is the most in-demand education level amongst healthcare occupations, indicated in 24.5 percent of postings. A high school diploma or equivalent accounts for 15.2 percent of posting requirements. Other top posted jobs include Physicians, All Other (300 postings), Clinical Laboratory Technologists and Technicians, All Other (295 postings), Health Technologists and Technicians, All Other (295 postings), Clinical Laboratory Technologists and Technicians, All Other (295 postings), and Medical Assistants (250 postings).
**Wage Overview**

Wages in Healthcare are generally higher than the state median hourly wage of $21.88, with pay increasing in line with required education, training, and experience for Healthcare’s top jobs. Registered Nurses, the top posted healthcare job in Q1, offers a median hourly wage of $39.20 ($81,536 annually). Although many positions require an associate degree or higher, there are several jobs above the state minimum wage open to those with a high school diploma or equivalent.

### Wage Overview for Top Posted Healthcare Jobs in Q1 2023

<table>
<thead>
<tr>
<th>Occupation Code</th>
<th>Occupation Name</th>
<th>10th Percentile Wages</th>
<th>25th Percentile Wages</th>
<th>Median Wages</th>
<th>75th Percentile Wages</th>
<th>90th Percentile Wages</th>
</tr>
</thead>
<tbody>
<tr>
<td>29-1141</td>
<td>Registered Nurses</td>
<td>$30.79</td>
<td>$31.06</td>
<td>$39.20</td>
<td>$40.20</td>
<td>$50.20</td>
</tr>
<tr>
<td>29-1229</td>
<td>Physicians, All Other</td>
<td>$29.78</td>
<td>$29.84</td>
<td>$30.91</td>
<td>$107.46</td>
<td>$125.63</td>
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<tr>
<td>29-2018</td>
<td>Clinical Laboratory Technologists and Technicians</td>
<td>$15.08</td>
<td>$18.97</td>
<td>$29.46</td>
<td>$37.49</td>
<td>$39.49</td>
</tr>
<tr>
<td>29-2099</td>
<td>Health Technologists and Technicians, All Other</td>
<td>$15.13</td>
<td>$18.88</td>
<td>$23.39</td>
<td>$29.80</td>
<td>$34.44</td>
</tr>
<tr>
<td>31-9092</td>
<td>Medical Assistants</td>
<td>$14.66</td>
<td>$15.00</td>
<td>$18.54</td>
<td>$19.00</td>
<td>$22.95</td>
</tr>
<tr>
<td>29-2034</td>
<td>Radiologic Technologists and Technicians</td>
<td>$23.72</td>
<td>$24.49</td>
<td>$30.73</td>
<td>$36.06</td>
<td>$39.34</td>
</tr>
<tr>
<td>29-2061</td>
<td>Licensed Practical and Licensed Vocational Nurses</td>
<td>$23.28</td>
<td>$24.45</td>
<td>$29.17</td>
<td>$29.84</td>
<td>$30.20</td>
</tr>
<tr>
<td>29-2072</td>
<td>Medical Records Specialists</td>
<td>$15.08</td>
<td>$18.73</td>
<td>$19.85</td>
<td>$24.50</td>
<td>$31.12</td>
</tr>
<tr>
<td>31-1131</td>
<td>Nursing Assistants</td>
<td>$14.66</td>
<td>$14.76</td>
<td>$18.02</td>
<td>$18.55</td>
<td>$18.69</td>
</tr>
<tr>
<td>29-1216</td>
<td>General Internal Medicine Physicians</td>
<td>$51.02</td>
<td>$66.02</td>
<td>$103.90</td>
<td>$118.00</td>
<td>$164.53</td>
</tr>
</tbody>
</table>

### In-Demand Technical Skills
- Nursing
- Nursing Care
- Patient Preparation
- Medical Records
- Radiology

### In-Demand Foundational Skills
- Communications
- Leadership
- Management
- Teaching
- Decision Making

### In-Demand Certifications
- Registered Nurse (RN)
- Basic Life Support (BLS) Certification
- Advanced Cardiovascular Life Support (ACLS) Certification
- Licensed Practical Nurse (LPN)
- Board Certified/Board Eligible

### In-Demand Education Level*
- High School Diploma: 15.3%
- Associate Degree: 16.5%
- Bachelor's Degree: 24.1%
- Master’s Degree: 6.0%
- Ph.D. Or professional Degree: 3.5%

### Top Posting Employers
- Tenet Healthcare
- Henry Ford Health System
- Ascension
- Dmc Sinai Grace Hospital
- United States Department of Veterans Affairs
- Dmc Children's Hospital Of Michigan
- Focus Staff
- Detroit Medical Center
- All Medical Personnel
- Healthcare Employment Network

*Not all job postings indicate the required educational attainment level; the percentages indicated may not total 100 percent.*
Information Technology (IT) jobs include occupations that are associated with entry-level, technical, and professional careers related to the design, development, support and management of hardware, software, multimedia, and systems integration services. While the Information Technology group does not currently employ as many individuals as the other groups here, it is quickly growing.

**Employment Over Time 2013-2023**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>7,326</td>
<td>7,366</td>
<td>7,306</td>
<td>7,644</td>
<td>7,847</td>
<td>7,940</td>
<td>8,322</td>
<td>8,299</td>
<td>8,275</td>
<td>8,418</td>
<td>8,531</td>
</tr>
</tbody>
</table>

**113 Information Technology Workers**

1.3% Increase from 2022

**Information Technology Education and Experience**

The Information Technology occupation group offers ample opportunities for active job seekers, with 4,500 postings in Q1. A bachelor's degree is the most in-demand education level, with a master's degree the second most required education level. Many IT occupation postings were open to workers with two to three years of experience, with 979 postings. Workers with four to six years of experience are also heavily in-demand with 1,214. Although 1,361 postings do not request any specific experience level, 289 postings requested workers with zero to one year of experience.

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Education Listed</td>
<td>31.8%</td>
</tr>
<tr>
<td>High school or GED</td>
<td>7.5%</td>
</tr>
<tr>
<td>Associate's degree</td>
<td>4.7%</td>
</tr>
<tr>
<td>Bachelor's degree</td>
<td>61.2%</td>
</tr>
<tr>
<td>Master's degree</td>
<td>13.4%</td>
</tr>
<tr>
<td>Ph.D. or professional degree</td>
<td>1.3%</td>
</tr>
</tbody>
</table>

Data: Lightcast | Analysis: Workforce Intelligence Network
Software Developers were the highest in-demand IT occupation in Q1, with 1,344 unique postings. Computer Occupations, All Other, which encompasses emerging occupations such as Web Administrators, and Search Marketing Strategists was next most in-demand with 1,153 unique postings. While most of the top jobs require a bachelor’s degree, Computer User Support Specialists (400 postings) only prefer some college education, but do not require a degree.
Wage Overview

Most IT jobs offer high wages, making for a lucrative opportunity for job seekers able to obtain the additional education related to these jobs. Software Developers, the top posted IT job in Q1, offers a median hourly wage of $50.38 ($104,790 annually). Computer User Support Specialists, which requires some college, no degree, offers a median wage of $23.84 ($49,582 annually).

<table>
<thead>
<tr>
<th>Occupation Code</th>
<th>Occupation Name</th>
<th>10th Percentile Wages</th>
<th>25th Percentile Wages</th>
<th>Median Wages</th>
<th>75th Percentile Wages</th>
<th>90th Percentile Wages</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-1252</td>
<td>Software Developers</td>
<td>$31.49</td>
<td>$39.62</td>
<td>$50.38</td>
<td>$63.87</td>
<td>$65.87</td>
</tr>
<tr>
<td>15-1299</td>
<td>Computer Occupations, All Other</td>
<td>$23.58</td>
<td>$30.44</td>
<td>$43.67</td>
<td>$50.85</td>
<td>$63.89</td>
</tr>
<tr>
<td>15-1211</td>
<td>Computer Systems Analysts</td>
<td>$32.47</td>
<td>$39.85</td>
<td>$50.06</td>
<td>$63.40</td>
<td>$80.90</td>
</tr>
<tr>
<td>15-1232</td>
<td>Computer User Support Specialists</td>
<td>$15.44</td>
<td>$18.67</td>
<td>$23.84</td>
<td>$30.28</td>
<td>$37.95</td>
</tr>
<tr>
<td>15-1212</td>
<td>Information Security Analysts</td>
<td>$23.57</td>
<td>$30.55</td>
<td>$48.70</td>
<td>$61.49</td>
<td>$65.62</td>
</tr>
<tr>
<td>15-1242</td>
<td>Database Administrators</td>
<td>$23.71</td>
<td>$31.11</td>
<td>$41.04</td>
<td>$50.76</td>
<td>$64.60</td>
</tr>
<tr>
<td>15-1244</td>
<td>Network and Computer Systems Administrators</td>
<td>$29.42</td>
<td>$31.44</td>
<td>$39.49</td>
<td>$50.10</td>
<td>$62.34</td>
</tr>
<tr>
<td>15-1254</td>
<td>Web Developers</td>
<td>$19.00</td>
<td>$30.69</td>
<td>$39.44</td>
<td>$49.67</td>
<td>$61.38</td>
</tr>
<tr>
<td>15-1243</td>
<td>Database Architects</td>
<td>$39.16</td>
<td>$49.44</td>
<td>$63.87</td>
<td>$68.43</td>
<td>$78.39</td>
</tr>
<tr>
<td>15-1251</td>
<td>Computer Programmers</td>
<td>$24.34</td>
<td>$31.62</td>
<td>$40.13</td>
<td>$51.29</td>
<td>$65.26</td>
</tr>
</tbody>
</table>

In-Demand Technical Skills
- Computer Science
- Agile Methodology
- SQL (Programming Language)
- Automation
- Software Development

In-Demand Foundational Skills
- Communications
- Management
- Leadership
- Problem Solving
- Troubleshooting (Problem Solving)

In-Demand Certifications
- Certified Information Systems Security Professional
- Project Management Professional Certification
- Security Clearance
- Certified Information System Auditor (CISA)
- Certified Scrum Master

In-Demand Education Level*
- High School Diploma: 7.5%
- Associate Degree: 4.7%
- Bachelor's Degree: 61.2%
- Master's Degree: 13.8%
- Ph.D. Or professional Degree: 1.3%

Top Posting Employers
- Deloitte
- PricewaterhouseCoopers
- Accenture
- KPMG
- Ensono
- Ensono
- Salesforce
- American Axle & Manufacturing
- R1 RCM
- HTC
- The Boston Consulting Group (BCG)

*Not all job postings indicate the required educational attainment level; the percentages indicated may not total 100 percent.
The Skilled Trades and Technicians occupation group includes jobs related to advanced manufacturing. Southeast Michigan has one of the highest demands for skilled trades labor, such as CNC machinists and welders, in the country.

NOTE: Skilled trades related to construction and assembly are not included in this cluster, as the focus is on advanced manufacturing only.

Skilled Trades Education and Experience

The Skilled Trades occupation group offers many opportunities for active job seekers in southeast Michigan. A high school diploma or equivalent was the most in-demand education level (604 postings), while a bachelor’s degree was the second most in-demand education level (392 postings). Many Skilled Trades occupation postings were open to workers with zero to three years of experience.

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Education Listed</td>
<td>44.5%</td>
</tr>
<tr>
<td>High school or GED</td>
<td>37.0%</td>
</tr>
<tr>
<td>Associate’s degree</td>
<td>10.1%</td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td>17.9%</td>
</tr>
<tr>
<td>Master’s degree</td>
<td>2.8%</td>
</tr>
<tr>
<td>Ph.D. or professional degree</td>
<td>0.2%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Experience Level</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Experience Listed</td>
<td>45.4%</td>
</tr>
<tr>
<td>0 - 1 Years</td>
<td>12.3%</td>
</tr>
<tr>
<td>2 - 3 Years</td>
<td>23.4%</td>
</tr>
<tr>
<td>4 - 6 Years</td>
<td>14.5%</td>
</tr>
<tr>
<td>7 - 9 Years</td>
<td>2.0%</td>
</tr>
<tr>
<td>10+ Years</td>
<td>2.5%</td>
</tr>
</tbody>
</table>

Data: Lightcast | Analysis: Workforce Intelligence Network
Maintenance and Repair Workers, General was the highest in-demand Skilled Trades occupation during Q1 (607 postings). Other top posted jobs include Industrial Engineering Technologists and Technicians (199 postings), First-Line Supervisors of Production and Operating Workers (165 postings), Industrial Production Managers (130 postings), and Production Workers, All Other (116 postings). The majority of this occupation group’s top posted jobs required either a high school diploma or equivalent, or an Associate’s degree, and offered moderate to long-term on-the-job training in lieu of experience.

### SKILLED TRADES AND TECHNICIANS OCCUPATION GROUP

#### Top Posted Jobs

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Postings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance and Repair Workers, General</td>
<td>607</td>
</tr>
<tr>
<td>Industrial Engineering Technologists and Technicians</td>
<td>199</td>
</tr>
<tr>
<td>First-Line Supervisors of Production and Operating Workers</td>
<td>165</td>
</tr>
<tr>
<td>Industrial Production Managers</td>
<td>130</td>
</tr>
<tr>
<td>Production Workers, All Other</td>
<td>116</td>
</tr>
<tr>
<td>Electrical and Electronic Engineering Technologists</td>
<td>64</td>
</tr>
<tr>
<td>Tool and Die Makers</td>
<td>40</td>
</tr>
<tr>
<td>Industrial Machinery Mechanics</td>
<td>40</td>
</tr>
<tr>
<td>Electro-Mechanical and Mechatronics Technologists</td>
<td>39</td>
</tr>
<tr>
<td>Engineering Technologists and Technicians, Except Drafters, All Other</td>
<td>33</td>
</tr>
<tr>
<td>Welders, Cutters, Solderers, and Brazers</td>
<td>28</td>
</tr>
<tr>
<td>Civil Engineering Technologists and Technicians</td>
<td>22</td>
</tr>
<tr>
<td>Machinists</td>
<td>20</td>
</tr>
<tr>
<td>Computer Numerically Controlled Tool Operators</td>
<td>20</td>
</tr>
<tr>
<td>Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic</td>
<td>15</td>
</tr>
<tr>
<td>Mechanical Engineering Technologists and Technicians</td>
<td>13</td>
</tr>
<tr>
<td>Surveying and Mapping Technicians</td>
<td>12</td>
</tr>
<tr>
<td>Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and Plastic</td>
<td>10</td>
</tr>
<tr>
<td>Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic</td>
<td>8</td>
</tr>
<tr>
<td>Cutting and Slicing Machine Setters, Operators, and Tenders</td>
<td>8</td>
</tr>
</tbody>
</table>

#### Education for Skilled Trades
- High school diploma or equivalent
- Postsecondary nondegree award
- Associate’s degree
- Bachelor’s degree
Eight of the top ten in-demand Skilled Trades occupation offer median hourly wages above $23.00. Maintenance and Repair Workers, General, the top posted Skilled Trades job in Q1, offered a median hourly wage of $18.83, ($39,166 annually). Job seekers can expect to see a significant shift in wages based on experience and education requirements: Industrial Production Managers requires an additional five years or more of work experience and offers a median hourly wage of $51.42 ($106,953 annually).

### Wage Overview for Top Posted Skilled Trades Jobs in Q1 2023

<table>
<thead>
<tr>
<th>Occupation Code</th>
<th>Occupation Name</th>
<th>10th Percentile Wages</th>
<th>25th Percentile Wages</th>
<th>Median Wages</th>
<th>75th Percentile Wages</th>
<th>90th Percentile Wages</th>
</tr>
</thead>
<tbody>
<tr>
<td>49-9071</td>
<td>Maintenance and Repair Workers, General</td>
<td>$13.96</td>
<td>$15.08</td>
<td>$18.83</td>
<td>$23.52</td>
<td>$29.52</td>
</tr>
<tr>
<td>17-3026</td>
<td>Industrial Engineering Technologists and Technicians</td>
<td>$17.85</td>
<td>$23.13</td>
<td>$28.30</td>
<td>$30.54</td>
<td>$36.43</td>
</tr>
<tr>
<td>51-1011</td>
<td>First-Line Supervisors of Production and Operating Workers</td>
<td>$18.17</td>
<td>$23.02</td>
<td>$29.71</td>
<td>$37.40</td>
<td>$48.20</td>
</tr>
<tr>
<td>11-3051</td>
<td>Industrial Production Managers</td>
<td>$30.75</td>
<td>$42.90</td>
<td>$51.42</td>
<td>$62.00</td>
<td>$79.18</td>
</tr>
<tr>
<td>51-9199</td>
<td>Production Workers, All Other</td>
<td>$10.26</td>
<td>$12.97</td>
<td>$13.35</td>
<td>$16.71</td>
<td>$20.71</td>
</tr>
<tr>
<td>17-3023</td>
<td>Electrical and Electronic Engineering Technologists and Technicians</td>
<td>$18.68</td>
<td>$23.31</td>
<td>$30.65</td>
<td>$37.91</td>
<td>$47.41</td>
</tr>
<tr>
<td>49-9041</td>
<td>Industrial Machinery Mechanics</td>
<td>$17.71</td>
<td>$22.46</td>
<td>$28.33</td>
<td>$30.38</td>
<td>$36.88</td>
</tr>
<tr>
<td>51-4111</td>
<td>Tool and Die Makers</td>
<td>$17.76</td>
<td>$22.53</td>
<td>$28.69</td>
<td>$35.14</td>
<td>$35.76</td>
</tr>
<tr>
<td>17-3024</td>
<td>Electro-Mechanical and Mechatronics Technologists and Technicians</td>
<td>$17.81</td>
<td>$22.64</td>
<td>$23.09</td>
<td>$35.53</td>
<td>$37.02</td>
</tr>
<tr>
<td>17-3029</td>
<td>Engineering Technologists and Technicians, Except Drafters, All Other</td>
<td>$17.86</td>
<td>$22.78</td>
<td>$36.16</td>
<td>$46.55</td>
<td>$54.24</td>
</tr>
</tbody>
</table>

### In-Demand Technical Skills
- Field Service Management
- Preventive Maintenance
- Plumbing
- Hand Tools
- HVAC

### In-Demand Foundational Skills
- Communications
- Troubleshooting (Problem Solving)
- Management
- Operations
- Customer Service

### In-Demand Certifications
- Automotive Service Excellence (ASE) Certification
- Commercial Driver’s License (CDL)
- HVAC Certification
- CompTIA A+
- Chauffeur License

### In-Demand Education Level*
- High School Diploma: 37.0%
- Associate Degree: 10.1%
- Bachelor’s Degree: 17.9%
- Master’s Degree: 2.8%

### Top Posting Employers
- Aerotek
- Taldeco
- Tradesmen International
- City Of Detroit
- Actalent
- American Axle & Manufacturing
- Randstad
- Ajm Packaging Corporation
- Mercedes-Benz Group
- Wayne State University

*Not all job postings indicate the required educational attainment level; the percentages indicated may not equal 100 percent.