

The logo for SME Fusion features a circular icon on the left containing a stylized white leaf. To its right, the text 'sme' is in a smaller font with a colorful swoosh above the 'e'. Below 'sme' is the word 'fusion' in a large, bold, white sans-serif font. Underneath 'fusion' are two horizontal lines, and below those is the text 'THE MANUFACTURING WORKFORCE EVENT' in a smaller, all-caps sans-serif font.

f sme
fusion
THE MANUFACTURING WORKFORCE EVENT

DETROIT, MI

April 8-10, 2025



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THE MANUFACTURING WORKFORCE EVENT

**PATHWAYS TO SUCCESS:
EXPLORING NEW YORK'S
TALENT DEVELOPMENT
STRATEGY**



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The Manufacturers Association

RTMA
ROCHESTER TECHNOLOGY & MANUFACTURING ASSOCIATION
Rochester
www.rtma.org



Central New York, Mohawk Valley & North Country
www.macny.org

 **CENTER for ECONOMIC GROWTH**
Albany
www.ceg.org

BNMA BUFFALO NIAGARA MANUFACTURING ALLIANCE
Advancing WNY Manufacturing
Buffalo
www.bnmalliance.com

 **MAST**
Jamestown
www.mast-wny.com

 **GREATER BINGHAMTON** CHAMBER OF COMMERCE
Binghamton
www.greaterbinghamtonchamber.com

 **The Council of Industry**
The Manufacturers Association of the Hudson Valley
The Hudson Valley
www.councilofindustry.org

 **BROOKLYN** CHAMBER OF COMMERCE
Brooklyn
www.brooklynchamber.com

IGNITE LI
The Manufacturing Consortium of Long Island
Long Island
www.ignitelongisland.org



REGISTERED APPRENTICESHIP PARTNERSHIPS



WE ARE YOUR DOL



"This project has been funded, either wholly or in part, with Federal funds from the Department of Labor, Employment & Training Administration under Contract number, 1605C2-22-C-006, (GAINS - Growing Apprenticeships in Nanotechnology and Semiconductors), the contents of this publication do not necessarily reflect the views or policies of the Department of Labor, nor does mention of trade names, commercial products, or organizations imply endorsement of same by the U.S. Government."

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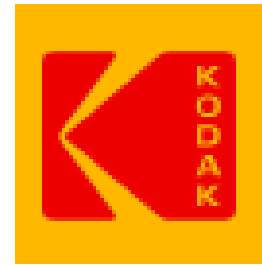


BAUSCH+LOMB
See better. Live better.

Barilla
The Italian Food Company. Since 1877.

Baxter **Berry**

 **GlobalFoundries**[®]



MOOG

plm[™]



**SEMIKRON
DANFOSS**

Wolfspeed[®]



Pre-Apprenticeship

MACNY became a Group Sponsor for Registered Apprenticeship in 2017. In 2023, MACNY started the first NYSDOL-recognized, manufacturing Direct Entry program to increase access to career pathways into the industry and build additional points of entry into Registered Apprenticeship.

Based on the statistics, by 2030 there will be an estimated 4 million manufacturing jobs that will need to be filled.



ADVANCE2™
APPRENTICESHIP





The State University
of New York



OFFICE OF **WORKFORCE DEVELOPMENT** AND **UPWARD MOBILITY @ SUNY**

- Registered Apprenticeship
- Small Business Development Centers
- Educational Opportunity Centers and ATTAIN Labs
- Internships & Experiential Learning
- Industry Engagement
- Microcredentials | Upskilling Programs



The State University
of **New York**



How SUNY Supports Apprenticeship

- Related Instruction
- Curriculum Development
- Pre-Apprenticeship
- Hybrid and Competency Assessments

- Industry Roundtables
- Apprenticeship Business Developers

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Spectrum of Apprenticeship in New York State

Career Exploration

Internship

Pre-Apprenticeship

Direct-Entry Program

Informal Apprenticeship

Registered Apprenticeship



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Spectrum of Apprenticeship in New York State

	Internship	Pre-Apprenticeship	Direct-Entry Program	Informal Apprenticeship	Registered Apprenticeship
Description	A work experience tied to a student's area of study or career interests	Designed to prepare individuals for entry into Registered Apprenticeship Programs or other job opportunities	A type of pre-apprenticeship program used often as a way to reach underrepresented populations and to meet a company's EEO goals.	Informal or unregistered apprenticeship programs include on-the-job training experience to learn a trade.	Learning a skilled trade through on-the-job training (hands-on experience) plus related outside academic instruction.
Length of Time	Varies	Varies from one week to 6 months	Varies from several weeks up to 6 months	Varies from 6 months to several years	1-5 years
Pay	Paid or Unpaid	Paid or Unpaid	Paid or Unpaid	Paid	Paid with built-in wage increases
Minimum Participant Age	Depends on industry	Depends on industry	Depends on industry	Depends on industry	16
Nationally recognized credential received upon completion?	Generally, none	Varies	Varies	None	Nationally recognized certificate
Instruction is standardized	Generally, no	No	Yes	No	Yes
Program is regulated	Varies	Varies	No	No	Yes
Is funding available to support this program?	For some programs	Yes	Yes	No	Yes
Is there a cost to the participant?	No	No	No	No	Generally, no
Who can operate the program?	Employers and CBOs	Employers and CBOs	Must be approved by NYSDOL	Any employer	Must be approved by NYSDOL
Curriculum is standardized	No	Not across all programs	No	No	Yes
Can training be counted as prior credit and experience as part of a Registered Apprenticeship program?	Varies	Yes	Yes	Varies	--

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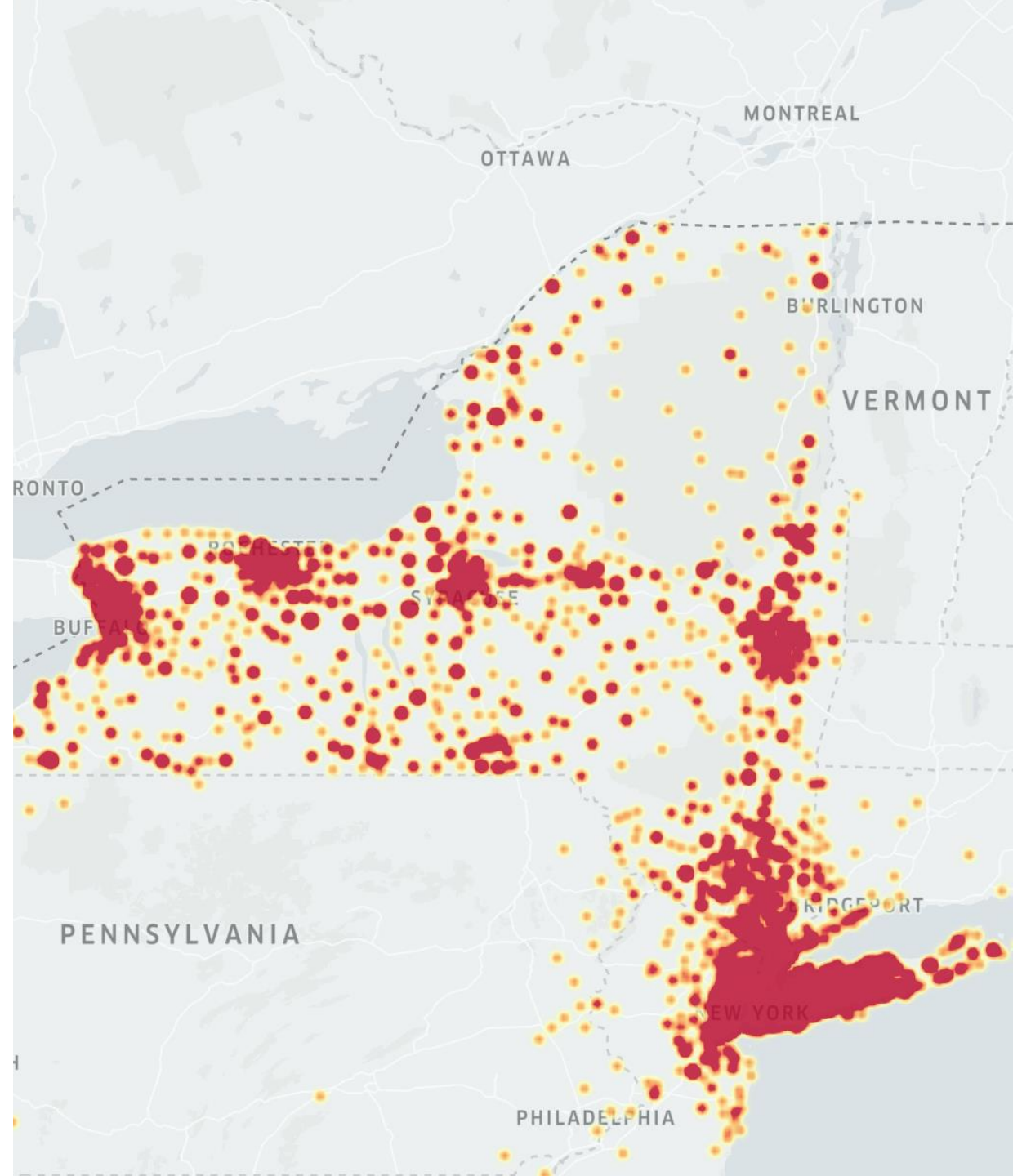
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New York State Workforce Surveys

2021, 2022, 2023 & 2024

Business Surveys:
10,700 responses

Job Seeker Surveys:
30,600 responses



Top Business Challenges

Challenge (Statewide, All Industries)	2023	2024
Quality of available workforce	--	63%
Attracting new workers	76%	62%
Inflation	54%	41%
Retaining current workers	49%	38%
Government regulations	37%	27%
Quiet quitting	27%	24%
Training current staff	22%	22%
Hiring / maintaining a diverse staff	31%	22%
Retirements	16%	16%
Keeping up with technology	13%	16%

Skills Lacking Among Candidates and New Employees

Non-Technical Skills (Statewide, All industries)	2021	2022	2023	2024
Self-motivation	64%	70%	61%	61%
Communication skills	66%	52%	56%	61%
Problem-solving/critical thinking	63%	48%	52%	59%
Timeliness/attendance	51%	55%	51%	50%
Attention to detail	58%	50%	46%	49%
Ability to take criticism	40%	31%	27%	41%
Time management	44%	32%	32%	38%
Personal awareness	34%	27%	26%	36%
Teamwork	31%	24%	21%	31%
Conflict management	33%	17%	18%	31%
English skills/grammar	31%	19%	21%	24%
Customer service	24%	19%	20%	21%
Basic math skills	30%	15%	17%	20%

Skills Lacking Among Candidates and New Employees

Technical Skills (Statewide, All industries)	2021	2022	2023	2024
Basic computer use / computer literacy	47%	44%	48%	38%
Software proficiency in Excel	39%	32%	34%	34%
Data analysis	15%	16%	19%	24%
Mechanical technical / engineering	23%	19%	22%	22%
Email	19%	19%	22%	19%
Software proficiency in Word	23%	17%	19%	16%

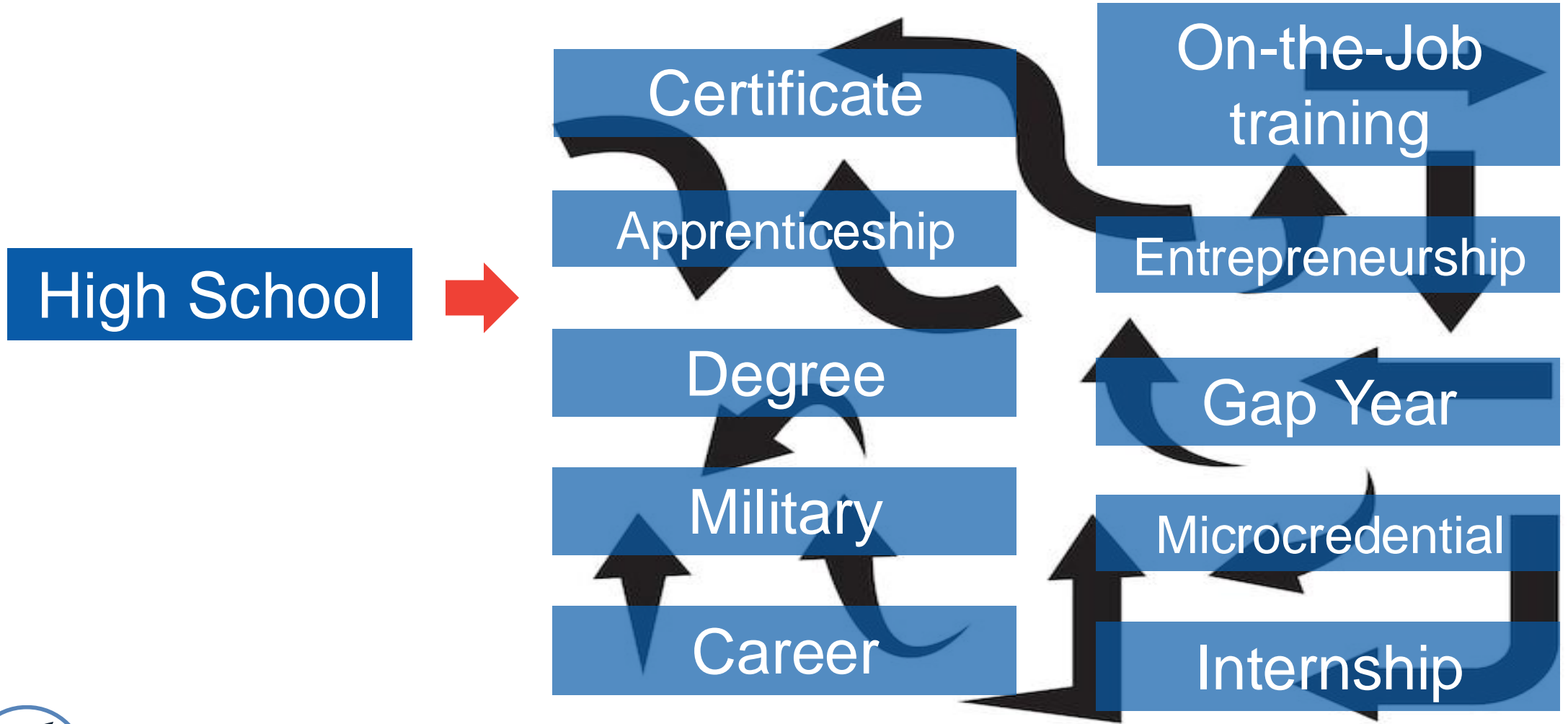
Job Seeker Barriers to Employment

Barrier (Statewide, 2024)	Mild	Severe
I don't have enough experience in the field	41%	17%
I don't have the right degree, certificate or credential	40%	22%
I don't have a large professional network	39%	25%
I face discrimination due to my age	37%	27%
I have insufficient education or training	36%	13%
I don't have enough modern / digital skills	35%	12%
I have gaps in employment	35%	15%
I'm unable to practice for potential job interview questions	27%	8%
I'm unable to create cover letters and resumes	25%	8%
I don't have access to reliable transportation	22%	9%
I'm unable to access technology to work remotely	22%	10%
I'm unable to access the Internet to search or apply for jobs, apply for jobs and/or participate in virtual interviews	19%	6%
I have a disability	18%	8%
I don't have a driver's license	14%	17%

Career Pathways



Career Pathways





GlobalFoundries®



Impactful Partnership Case Study

Registered Apprenticeship at GF



Expanded Pipeline for Recruitment



Reaching new populations for talent



Improved retention



REGISTERED APPRENTICESHIP SUCCESS



Toni Aho

Production Operator

Real Life Rosie® Graduate

Industrial Manufacturing Technician Apprentice

Semikron Danfoss



Kendall McDaniel

Machine Operator II

Industrial Manufacturing Technician Journey Worker

Electro-Mechanical Technician Apprentice

Indium Corporation

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