



ADVANCED MANUFACTURING

Core skills involve robotics, programming, mechatronics, and innovation. These transfer into IT, energy, and engineering roles. **The workforce in this cluster is 85% male.**

CLUSTER SNAPSHOT

Total Jobs (2024)	12,561
10-Year Growth Rate	19%
Total Occupations	24
Average Openings Per Occupation	523
% High Opportunity Occupations	17%
Average Hourly Earnings	\$31/HR
Top Industries	<ol style="list-style-type: none"> Administrative and Support and Waste Management and Remediation Services Manufacturing

TALENT SUPPLY

Training Provider	Certification	Skills Prepared	Employers Reviewed	Meets Employer Needs (Y/N)?
Charlotte Area Fund	Fiber Optics Premise & Cabling			
Jennings O'Neil Career Academy	Fiber Optic Tech & Pre-Apprenticeship			

EMPLOYER DEMAND VALIDATION

Top Employers: Pye-Barker Fire & Safety, Johnson Controls, GPAC, Siemens

Employer Name	Occupational Needs	Skill Needs	Comments



AGRICULTURE, FOOD & NATURAL RESOURCES

Skills include biological systems, equipment operation, environmental management, and physical stamina. These transfer to conservation, life sciences, and logistics. **The workforce is 18% Hispanic**, more than double the county average, reflecting the strong role of immigrant labor in this sector.

CLUSTER SNAPSHOT

Total Jobs (2024)	6,321
10-Year Growth Rate	N/A
Total Occupations	19
Average Openings Per Occupation	332
% High Opportunity Occupations	N/A
Average Hourly Earnings	N/A
Top Industries	<ol style="list-style-type: none"> Administrative and Support and Waste Management and Remediation Services Professional, Scientific, and Technical Services

TALENT SUPPLY

Training Provider	Certification	Skills Prepared	Employers Reviewed	Meets Employer Needs (Y/N)?

EMPLOYER DEMAND VALIDATION

Top Employers: Metrolina Greenhouses, SavAtree, Novant Health

Employer Name	Occupational Needs	Skill Needs	Comments



ARCHITECTURE & CONSTRUCTION

Skills include technical design, project management, safety awareness, and teamwork. These competencies link to advanced manufacturing, utilities, and engineering roles. **The workforce is over 92% male with higher Hispanic participation (17%),** reflecting both gender imbalance and strong demand for bilingual and cross-cultural talent.

CLUSTER SNAPSHOT

Total Jobs (2024)	81,770
10-Year Growth Rate	10%
Total Occupations	55
Average Openings Per Occupation	1,486
% High Opportunity Occupations	74%
Average Hourly Earnings	\$27/HR
Top Industries	<ol style="list-style-type: none"> Construction Administrative and Support and Waste Management and Remediation Services

TALENT SUPPLY

Training Provider	Certification	Skills Prepared	Employers Reviewed	Meets Employer Needs (Y/N)?
Trades Tech	Drywall Installer Painting			
OMITT	Electrical Plumbing			

EMPLOYER DEMAND VALIDATION

Top Employers: Centimark Corporation, Colliers Engineering & Design, GPAC, Fountain Electric and Services

Employer Name	Occupational Needs	Skill Needs	Comments



ARTS, A/V TECHNOLOGY & COMMUNICATIONS

Skills emphasize creativity, storytelling, technical production, and digital media fluency. These transfer to marketing, business communication, and technology development. **The cluster is 76% White**, with underrepresentation of other groups compared to countywide diversity.

CLUSTER SNAPSHOT

Total Jobs (2024)	27,314
10-Year Growth Rate	14%
Total Occupations	53
Average Openings Per Occupation	515
% High Opportunity Occupations	26%
Average Hourly Earnings	\$25/HR
Top Industries	<ol style="list-style-type: none"> Professional, Scientific, and Technical Services Retail Trade

TALENT SUPPLY

Training Provider	Certification	Skills Prepared	Employers Reviewed	Meets Employer Needs (Y/N)?
CMS CTE	Adobe Academy			
Central Piedmont	AV/ Sound Engineering			

EMPLOYER DEMAND VALIDATION

Top Employers: SAS Retail Services, Lowe's, CPCC

Employer Name	Occupational Needs	Skill Needs	Comments



BUSINESS MANAGEMENT & ADMINISTRATION

Core skills include strategic planning, operations, data analysis, and team leadership. These competencies connect directly to roles in finance, consulting, and entrepreneurship. **The workforce is two-thirds female**, creating pathways for women into senior leadership and executive positions.

CLUSTER SNAPSHOT

Total Jobs (2024)	217,947
10-Year Growth Rate	8%
Total Occupations	49
Average Openings Per Occupation	4,448
% High Opportunity Occupations	91%
Average Hourly Earnings	\$34/HR
Top Industries	<ol style="list-style-type: none"> Administrative and Support and Waste Management and Remediation Services Finance and Insurance

TALENT SUPPLY

Training Provider	Certification	Skills Prepared	Employers Reviewed	Meets Employer Needs (Y/N)?
COMNet Group	Agile Project Management using SCRUM Certified Business Analyst Lean Six Sigma Green Belt PMP (Project Management Professional) Project Coordinators (CAPM)			
Central Piedmont	Human Resource SHRM-CP/SCP Prep Human Resources Certificate Program Lean Six Sigma Black Belt Certification Lean Six Sigma Green Belt Certification Professional Bookkeeper Certificate Project Management with Agile Plus Certificate SQL Business Analytics			

TeachPath PM Training	PMP/CAPM Exam Prep
UNC Charlotte CE	HR Certification Exam Prep Human Resource Certificate Project Management Certificate

EMPLOYER DEMAND VALIDATION

Top Employers: Wells Fargo, Spectrum, Truist, Honeywell

Employer Name	Occupational Needs	Skill Needs	Comments



EDUCATION & TRAINING

Skills include instruction, communication, mentorship, and adaptability. These are transferable to HR, workforce development, and leadership roles in other sectors. **The field is 77% female**, reflecting strong representation but also pointing to gender imbalance in related leadership pathways.

CLUSTER SNAPSHOT

Total Jobs (2024)	72,458
10-Year Growth Rate	7%
Total Occupations	30
Average Openings Per Occupation	2,415
% High Opportunity Occupations	71%
Average Hourly Earnings	\$25/HR
Top Industries	<ol style="list-style-type: none"> 1. Educational Services 2. Health Care and Social Assistance

TALENT SUPPLY

Training Provider	Certification	Skills Prepared	Employers Reviewed	Meets Employer Needs (Y/N)?
CMS CTE	Teaching/Training (TETR)			
Central Piedmont	Early Childhood Education Cert			

EMPLOYER DEMAND VALIDATION

Top Employers: CMS, UNCC, CPCC, Atrium Health

Employer Name	Occupational Needs	Skill Needs	Comments



FINANCE

Finance jobs require quantitative analysis, critical thinking, risk management, and communication. These skills transfer across business operations, consulting, and data-driven management roles. **The workforce is about 68% White**, higher than average, highlighting equity gaps and the need to expand pathways into financial careers.

CLUSTER SNAPSHOT

Total Jobs (2024)	86,050
10-Year Growth Rate	16%
Total Occupations	27
Average Openings Per Occupation	3,187
% High Opportunity Occupations	84%
Average Hourly Earnings	\$43/HR
Top Industries	<ol style="list-style-type: none"> 1. Finance and Insurance 2. Administrative and Support and Waste Management and Remediation Services

TALENT SUPPLY

Training Provider	Certification	Skills Prepared	Employers Reviewed	Meets Employer Needs (Y/N)?
CMS CTE	Finance (FINA) Accounting (ACCT)			
Central Piedmont	Banking Services			
Goodwill	BankWorks			

EMPLOYER DEMAND VALIDATION

Top Employers: Wells Fargo, Truist, Bank of America, Honeywell, US Bank

Employer Name	Occupational Needs	Skill Needs	Comments



GOVERNMENT

This cluster builds on skills in policy analysis, leadership, regulatory knowledge, and communication. These talents transfer to nonprofit leadership, compliance, and organizational management roles. Notably, **Black workers represent 29%** of this cluster in Mecklenburg.

CLUSTER SNAPSHOT

Total Jobs (2024)	9,941
10-Year Growth Rate	5%
Total Occupations	11
Average Openings Per Occupation	903
% High Opportunity Occupations	59%
Average Hourly Earnings	\$21/HR
Top Industries	<ol style="list-style-type: none"> 1. Health Care and Social Assistance 2. Administrative and Support and Waste Management and Remediation Services

TALENT SUPPLY

Training Provider	Certification	Skills Prepared	Employers Reviewed	Meets Employer Needs (Y/N)?

EMPLOYER DEMAND VALIDATION

Top Employers: US Postal Service, CMS

Employer Name	Occupational Needs	Skill Needs	Comments



HEALTHCARE

Healthcare/ Health Science careers require scientific knowledge, problem-solving, communication, and compassion. These skills are transferable to research, technology development, and policy roles in health innovation. **The field is over 80% female, with higher Black representation (32%) than average,** underscoring its role in diverse healthcare pathways.

CLUSTER SNAPSHOT

Total Jobs (2024)	140,586
10-Year Growth Rate	14%
Total Occupations	104
Average Openings Per Occupation	1,351
% High Opportunity Occupations	58%
Average Hourly Earnings	\$42/HR
Top Industries	<ol style="list-style-type: none"> 1. Health Care and Social Assistance 2. Administrative and Support and Waste Management and Remediation Services

TALENT SUPPLY

Training Provider	Certification	Skills Prepared	Employers Reviewed	Meets Employer Needs (Y/N)?
ASAP Dental Assistant Program	Dental Assistant Program 1			
Central Piedmont CC	Nurse Aide I (CNA) Phlebotomy Training			
Chosen Healthcare Institute	Medical Assistant Medication Aide Nurse Aide I (CNA I) Nurse Aide I Refresher Nurse Aide II (CNA II) Phlebotomy			
DA Academy of NC	Dental Assisting +			
NC Dental U	Dental Assistant 1 w/ X-ray & Dental Business			
UNC Charlotte CE	CCMA + CEHRS			

EMPLOYER DEMAND VALIDATION

Top Employers: Atrium Health, Novant Health, Soliant Health, Bayada Home Health Care, Titan Medical

Employer Name	Occupational Needs	Skill Needs	Comments



HOSPITALITY & TOURISM

Key skills include customer service, cultural awareness, organization, and adaptability. These are transferable to retail, events, and marketing. **Youth workers ages 14-18 make up 14% of this workforce, making this cluster a critical entry point into the workforce.**

CLUSTER SNAPSHOT

Total Jobs (2024)	181,925
10-Year Growth Rate	16%
Total Occupations	51
Average Openings Per Occupation	3,567
% High Opportunity Occupations	26%
Average Hourly Earnings	\$20/HR
Top Industries	<ol style="list-style-type: none"> Accommodation and Food Services Retail Trade

TALENT SUPPLY

Training Provider	Certification	Skills Prepared	Employers Reviewed	Meets Employer Needs (Y/N)?
CMS CTE	Culinary Arts Applications (CULA), Culinary Arts Internship (CULI) Hospitality and Tourism Management (HOTM)			

EMPLOYER DEMAND VALIDATION

Top Employers: Marriott International, Compass Group, Hilton, ABM Industries

Employer Name	Occupational Needs	Skill Needs	Comments



HUMAN SERVICES

This cluster emphasizes compassion, problem-solving, communication, and case management. These skills transfer to healthcare, education, and nonprofit leadership. **The workforce is 74% female** highlighting opportunities to recruit men into this field.

CLUSTER SNAPSHOT

Total Jobs (2024)	46,363
10-Year Growth Rate	12%
Total Occupations	30
Average Openings Per Occupation	1,545
% High Opportunity Occupations	37%
Average Hourly Earnings	\$23/HR
Top Industries	<ol style="list-style-type: none"> 1. Other Services (except Public Administration) 2. Health Care and Social Assistance

TALENT SUPPLY

Training Provider	Certification	Skills Prepared	Employers Reviewed	Meets Employer Needs (Y/N)?
CMS CTE	Healthcare Professional (HPCP) Counseling and Mental Health (CMHC)			

EMPLOYER DEMAND VALIDATION

Top Employers: YMCA, Mecklenburg County, Atrium Health, Emergency Childcare Services

Employer Name	Occupational Needs	Skill Needs	Comments



INFORMATION TECHNOLOGY

Core skills include programming, systems analysis, cybersecurity awareness, and logical reasoning. These talents translate into roles in finance, manufacturing automation, and data science. **The workforce is 70% male with elevated Asian representation (18%),** highlighting both a tech-driven skill concentration and opportunity to broaden participation.

CLUSTER SNAPSHOT

Total Jobs (2024)	66,786
10-Year Growth Rate	20%
Total Occupations	17
Average Openings Per Occupation	3,928
% High Opportunity Occupations	91%
Average Hourly Earnings	\$56/HR
Top Industries	<ol style="list-style-type: none"> Professional, Scientific, and Technical Services Administrative and Support and Waste Management and Remediation Services

TALENT SUPPLY

Training Provider	Certification	Skills Prepared	Employers Reviewed	Meets Employer Needs (Y/N)?
COMNet Group	Java Programming Comp TIAA+ / IIF+ Certification Security+ IT Help Desk Technician Quality Assurance with QTP Certified Information Systems Auditor (CISA) CISSP/CEH/CISM Security Track CISCO Certified Network Associate (CCNA) Salesforce.com Analyst			
Central Piedmont	Java API Development IT Support Specialist Cybersecurity Analyst Comp TIA Network+			
Innovative Systems Group	Cybersecurity Apprenticeship Program			

UNC Charlotte CE	CISSP Bootcamp Comp TIA Security+ Certification
Road to Hire	IT Apprenticeships

EMPLOYER DEMAND VALIDATION

Top Employers: Wells Fargo, Truist, AT&T, Avidxchange, Cognizant, Innova Corporation

Employer Name	Occupational Needs	Skill Needs	Comments



LAW, PUBLIC SAFETY, CORRECTIONS & SECURITY

This cluster develops decision-making, conflict resolution, crisis management, and physical readiness. Skills cross into legal services, security, and emergency planning. **The field is 62% male**, showing a modest gender imbalance compared to county averages.

CLUSTER SNAPSHOT

Total Jobs (2024)	47,192
10-Year Growth Rate	9%
Total Occupations	37
Average Openings Per Occupation	1,275
% High Opportunity Occupations	42%
Average Hourly Earnings	\$36/HR
Top Industries	<ol style="list-style-type: none"> Professional, Scientific, and Technical Services Administrative and Support and Waste Management and Remediation Services

TALENT SUPPLY

Training Provider	Certification	Skills Prepared	Employers Reviewed	Meets Employer Needs (Y/N)?
Central Piedmont	Basic Law Enforcement Training			
UNC Charlotte CE	Paralegal Professional Certificate			

EMPLOYER DEMAND VALIDATION

Top Employers: FBI, American Security Programs, Allied Universal, State of North Carolina, Honeywell

Employer Name	Occupational Needs	Skill Needs	Comments



LIFE SCIENCES

Core skills include lab techniques, data analysis, scientific writing, and critical thinking. These connect to biotech, healthcare, and environmental science. **The workforce is 73% White with low Hispanic representation (2%),** highlighting access gaps in high-growth science careers.

CLUSTER SNAPSHOT

Total Jobs (2024)	1,825
10-Year Growth Rate	N/A
Total Occupations	15
Average Openings Per Occupation	121
% High Opportunity Occupations	N/A
Average Hourly Earnings	N/A
Top Industries	<ol style="list-style-type: none"> Health Care and Social Assistance Administrative and Support and Waste Management and Remediation Services

TALENT SUPPLY

Training Provider	Certification	Skills Prepared	Employers Reviewed	Meets Employer Needs (Y/N)?

EMPLOYER DEMAND VALIDATION

Top Employers: CMS, Novant Health, Atrium Health, Catawba Lands Conservancy, UNCC

Employer Name	Occupational Needs	Skill Needs	Comments



MANUFACTURING

Core skills involve precision, process monitoring, mechanical aptitude, and quality control. These transfer to logistics, construction, and advanced manufacturing pathways. **With 80% of workers male**, the cluster highlights opportunities to recruit women into production careers.

CLUSTER SNAPSHOT

Total Jobs (2024)	128,524
10-Year Growth Rate	7%
Total Occupations	119
Average Openings Per Occupation	1080
% High Opportunity Occupations	64%
Average Hourly Earnings	\$27/HR
Top Industries	TBD

TALENT SUPPLY

Training Provider	Certification	Skills Prepared	Employers Reviewed	Meets Employer Needs (Y/N)?
Central Piedmont	Welding Technology Certificate (Entry Level)			
Jennings O'Neil Career Academy	Facility Maintenance			
OMITT Training	Certified Apartment Maintenance Technician (CAMT) HVAC Welding			
Urban League	HVAC Training Program			

EMPLOYER DEMAND VALIDATION

Top Employers: TBD

Employer Name	Occupational Needs	Skill Needs	Comments



MARKETING, SALES & SERVICE

This cluster develops persuasion, customer engagement, digital communication, and problem-solving. These transferable skills are valuable in business development, consulting, and entrepreneurship. Demographics are close to countywide averages, making this cluster broadly accessible for diverse pathways.

CLUSTER SNAPSHOT

Total Jobs (2024)	178,823
10-Year Growth Rate	10%
Total Occupations	27
Average Openings Per Occupation	6,623
% High Opportunity Occupations	79%
Average Hourly Earnings	\$35/HR
Top Industries	<ol style="list-style-type: none"> Retail Trade Manufacturing

TALENT SUPPLY

Training Provider	Certification	Skills Prepared	Employers Reviewed	Meets Employer Needs (Y/N)?
COMNet Group	Digital Marketing Certified Associate			

EMPLOYER DEMAND VALIDATION

Top Employers: Lowe's, AT&T, Wells fargo, Macy's, Goodwill

Employer Name	Occupational Needs	Skill Needs	Comments



MINING, OIL & GAS

This cluster requires equipment operation, geology knowledge, risk management, and physical stamina. Skills are transferable to utilities, construction, and environmental remediation. **The workforce is 95% male**, with women nearly absent from these roles.

CLUSTER SNAPSHOT

Total Jobs (2024)	689
10-Year Growth Rate	N/A
Total Occupations	14
Average Openings Per Occupation	6,623
% High Opportunity Occupations	79%
Average Hourly Earnings	\$35/HR
Top Industries	<ol style="list-style-type: none"> 1. Construction 2. Administrative and Support and Waste Management and Remediation Services

TALENT SUPPLY

Training Provider	Certification	Skills Prepared	Employers Reviewed	Meets Employer Needs (Y/N)?

EMPLOYER DEMAND VALIDATION

Top Employers: E.S. Wagner Company, Zachry Construction Corporation, Carolina Industrial Products, Duke Energy, GPAC

Employer Name	Occupational Needs	Skill Needs	Comments



SCIENCE, TECHNOLOGY, ENGINEERING & MATHEMATICS (STEM)

Skills include research, technical design, experimentation, and analytical reasoning. These pathways connect into IT, manufacturing, and life sciences. **The workforce is 78% male and 75% White**, with underrepresentation of Black workers at 10%, pointing to access gaps in STEM careers.

CLUSTER SNAPSHOT

Total Jobs (2024)	23,600
10-Year Growth Rate	19%
Total Occupations	55
Average Openings Per Occupation	429
% High Opportunity Occupations	32%
Average Hourly Earnings	\$46/HR
Top Industries	<ol style="list-style-type: none"> Professional, Scientific, and Technical Services Administrative and Support and Waste Management and Remediation Services

TALENT SUPPLY

Training Provider	Certification	Skills Prepared	Employers Reviewed	Meets Employer Needs (Y/N)?
CMS CTE	Drafting Engineering (DREN)			

EMPLOYER DEMAND VALIDATION

Top Employers: Black & Veatch, Siemens Energy, Burns & McDonnell, WSP Global, Cybercoders, Honeywell

Employer Name	Occupational Needs	Skill Needs	Comments



TRANSPORTATION, DISTRIBUTION & LOGISTICS

Skills center on spatial awareness, planning, equipment operation, and organizational coordination. These are transferable to construction, manufacturing, and emergency response fields. **The cluster is 74% male with 36% Black representation**, well above the county average, showing strong participation and growth potential for upward mobility.

CLUSTER SNAPSHOT

Total Jobs (2024)	144,917
10-Year Growth Rate	10%
Total Occupations	48
Average Openings Per Occupation	3,019
% High Opportunity Occupations	88%
Average Hourly Earnings	\$28/HR
Top Industries	<ol style="list-style-type: none"> 1. Transportation and Warehousing 2. Administrative and Support and Waste Management and Remediation Services

TALENT SUPPLY

Training Provider	Certification	Skills Prepared	Employers Reviewed	Meets Employer Needs (Y/N)?
CMS CTE	SREB Global Logistics and Supply Chain Management (GLSC)			
160 Driving Academy	CDL Training			
CL Driving School	CDL Professional Truck Driving (Class A)			
Central Piedmont	Forklift Certification Training			
Launched For Life	WIELD			
Roadwayz CDL School	CDL-A			
TransTech (Newton)	Class A CDL Training			
UNC Charlotte CE	Freight Broker/Agent Training			

EMPLOYER DEMAND VALIDATION

Top Employers: Sysco, Cargo Transporters, Carrier Corporation, The Cocoa-Cola Company, Amazon, Atrium Health

Employer Name	Occupational Needs	Skill Needs	Comments



UTILITIES

Skills include technical troubleshooting, systems monitoring, safety adherence, and repair. These talents transfer to construction, advanced manufacturing, and public infrastructure management. **The workforce is 94% male**, one of the most gender-imbalanced clusters in the region.

CLUSTER SNAPSHOT

Total Jobs (2024)	3,649
10-Year Growth Rate	N/A
Total Occupations	12
Average Openings Per Occupation	304
% High Opportunity Occupations	N/A
Average Hourly Earnings	N/A
Top Industries	<ol style="list-style-type: none"> 1. Construction 2. Administrative and Support and Waste Management and Remediation Services

TALENT SUPPLY

Training Provider	Certification	Skills Prepared	Employers Reviewed	Meets Employer Needs (Y/N)?

EMPLOYER DEMAND VALIDATION

Top Employers: Next Level Technician, Kanaan Communications, Prince Telecom, Pike Electric, City of Charlotte, Duke Energy, Colliers Engineering & Design

Employer Name	Occupational Needs	Skill Needs	Comments