

# SKILLS MATRIX



# INTRODUCTION

The term “skills gap” is something that has often been heard in the news, amongst employers, and referenced as a barrier to employment. To improve the understanding of the types of skills needed by local employers, Workforce WindsorEssex created a matrix of the types of skills, education, experience, and wages associated with in-demand occupations. Additionally, we surveyed employers, educational institutions, service providers, and other stakeholders to create community skills definitions to foster a common awareness of gaps. Based on their feedback, three categories of skills were created: foundational skills, soft skills, and technical skills. The category definitions and definitions of associated skills included in the matrix can be found below.

## METHODOLOGY

To identify the top 50 most in-demand occupations in our region, Workforce WindsorEssex examined job posting information from Vicinity Jobs, held consultations with employers, and analyzed results from quarterly workforce surveys. Then, the matrix of jobs most commonly posted and identified by employers was created, with the types of skills, education, and experience needed for each. This resource will be a valuable asset to students as they prepare for their future, for recent graduates as they examine the opportunities in our region following graduation, and for jobseekers as they look to reconnect to the workforce.



# CONSULTATION SUMMARY

From May 2016 to January 2017, Workforce WindsorEssex conducted 73 consultations with employers in our region. These employers represent a variety of industries, with the highest representation being manufacturing (24%); professional, scientific, and professional services (19%); administrative and support, waste management, and remediation services (9%); health care and social assistance (9%); and agriculture, forestry, fishing, and hunting (7%). This representation reflects most of the top industries in our local economy. Of those we consulted with, 57% were small businesses, 29% were medium-sized businesses, and 14% were large businesses. Both Windsor and Essex County businesses were represented in consultations, with 66% of businesses located in Windsor and 34% located in Essex County.

When consulting with these businesses, we asked a variety of questions pertaining to skills, training, recruitment and skill development programs, transportation, educational programs, retention, and hiring. We asked “Yes” and “No” questions to gather quantitative data combined with open-ended questions to gather qualitative data.

The value of creating a skills inventory was proven as 75% of employers indicated they had a skills gap. Additionally, 71% of employers indicated they face challenges in recruitment, with many indicating this is due to a lack of qualified candidates. Furthermore, 76% of employers indicate they regularly post for the same position, demonstrating certain positions are particularly in-demand and could be filled by training for individuals focused on these positions.

As 88% of employers said they are anticipating employment growth in the next 1 to 3 years, the skills inventory can be used as a tool to ensure the workforce is prepared to foster this growth and support the development of our local industries.

Employers, educational institutions, and service providers were also surveyed about skill definitions. Based on the aforementioned consultations and a literature review, we developed skill definitions for three categories: foundational, soft, and technical. We provided these definitions in the survey, and respondents were asked to rate how well they believed each definition described the skill category as well as provide comments suggesting changes to the definitions as needed. Based on their ratings and comments, the final community definitions of the three skill categories are as follows:

## **FOUNDATIONAL SKILLS**

Skills that provide a basis for work and lifelong learning, developed throughout one’s life in settings both in and outside of formal education (Ex: Oral communication, written communication, computer use, document use, numeracy, problem solving, critical thinking, and decision-making)

## **SOFT SKILLS**

Character skills that enable individuals to perform effectively in their environment (Ex: Interpersonal, work ethic, time management, leadership, teamwork, attention to detail, adaptability, etc.)

## **TECHNICAL SKILLS**

Skills related to performing a specific task, often taught in a formal or vocational setting (Ex: Truck driving, software development, blueprint reading, etc.)

Consulting with the relevant stakeholders on the skill categories and definitions allows for confidence in these community definitions and a better understanding of the skills mismatch in Windsor-Essex

# DEFINITIONS

## **FOUNDATIONAL SKILLS**

Skills that provide a basis for work and lifelong learning, developed throughout one's life in settings both in and outside of formal education.

## **ORAL COMMUNICATION**

Talking to others to convey information effectively and asking questions as appropriate.

Written Communication – Expressing oneself clearly in writing as appropriate for the needs of the audience.

## **COMPUTER USE**

Using a computer and applications or similar technology to complete daily tasks.

Document Use – Locating, interpreting, entering, and using text and/or visual information such as symbols, numbers, letters, and images in various formats.

## **NUMERACY**

Aptitude in the use of numbers and ability to think in quantitative terms.

## **PROBLEM SOLVING**

Identifying complex problems and reviewing related information to develop and evaluate options and implement solutions.

## **CRITICAL THINKING**

Using logic and reasoning to identify the strengths and weaknesses of solutions, conclusions, or approaches to problems.

## **DECISION MAKING**

Considering the relative costs and benefits of potential actions to choose the most appropriate one.

## **SOFT SKILLS**

Character skills that enable individuals to perform effectively in their environment.

## **INTERPERSONAL**

Interacting pleasantly with and maintaining good working relationships with fellow staff, customers, clients, and others.

## **PLANNING**

Thinking about and organizing activities required to achieve a desired goal.

## **ATTENTION TO DETAIL**

Being careful and thorough when completing work tasks.

## **CONFLICT RESOLUTION**

Ability to find a peaceful and agreeable solution to a disagreement.

## **LEADERSHIP**

Willingness to lead, take charge, and offer opinions and direction.

## **SELF-MOTIVATION**

Taking on responsibilities and challenges and working with minimal supervision.

## **TEAMWORK**

Working efficiently and effectively with others rather than alone.

## **TECHNICAL SKILLS**

Skills related to performing a specific task, often taught in a formal or vocational setting.

## **ANALYSIS**

Examining information and using logic to address issues and problems.

## **MARKETING**

Knowledge of methods for showing, promoting, and selling products or services.

## **OPERATIONS MANAGEMENT**

Administration of business practices to create the highest level of efficiency possible within an organization.

## **SCHEDULING**

Assigning an appropriate number of workers to tasks at a given time.

## **REPORT WRITING**

Creating an account or statement that describes an event, situation, or occurrence.

**SUPERVISING**

Motivating, developing, and directing people as they work.

**RECRUITING**

Knowledge of procedures for personnel selection, training, and compensation.

**COMPUTER PROGRAMMING**

Developing and implementing sets of instructions to enable a computer to perform a certain task.

**PUBLIC RELATIONS**

Using a strategic communication process to build mutually beneficial relationships between organizations and their stakeholders or the general public.

**ADVISING**

Providing counsel or offering a suggestion.

**CMM**

Operating a coordinate measuring machine to measure the physical geometrical characteristics of an object.

**CAD**

Using a software for computer-aided design to create precision drawings, technical illustrations, or 3D models.

**CNC**

Operating a computer numerically controlled machine tool through the means of a prepared program containing coded alphanumeric data.

**MANUAL DEXTERITY**

Making coordinated hand and finger movements to grasp and manipulate objects.

**BLUEPRINT READING**

Understanding the reproduction of a technical drawing, documenting an architecture or an engineering design.

**FOOD PREPARATION**

Making food for eating by selecting, measuring, and combining ingredients in an ordered procedure.

**PERSONAL CARE**

Attending to the physical needs of people who are disabled or unable to take care of themselves, including tasks such as bathing and cooking.

**RECORD-KEEPING**

Maintaining the history of activities by entering data into ledgers or journals, filing documents, and other tasks.

**MACHINE OPERATION**

Running specialized machines that perform a task.

**CLEANING**

Ensuring an object or environment is free from unwanted physical substances.

**PHYSICAL APTITUDE**

Lifting, holding, and moving items or standing on one's feet for long hours.

**HORTICULTURE**

Garden cultivation and management, including landscape design and grounds maintenance.

**FORKLIFT**

Operating a small vehicle with prongs that can be slid under heavy loads and raised for moving and stacking materials.

**PRESENTATION**

Showing, describing, or explaining something to a person or group of people.

**TRUCK DRIVING**

The control and operation of a truck, often for long distances.

**AGRICULTURAL CARE**

The science or practice of farming, including cultivating soil to grow crops and rearing animals to produce food or other products.

# FOUNDATIONAL SKILLS

## NATIONAL OCCUPATION CODE & TITLE

### SKILL LEVEL A: UNIVERSITY EDUCATION

Oral Communication    Written Communication    Computer Use    Document Use    Numeracy    Problem Solving    Critical Thinking    Decision Making

0711  
Construction Managers  
Project Manager, Construction Project Manager, Project Coordinator  
Typical Experience: 3 to 5 years  
Median Hourly Wage: \$38.05

0601  
Corporate Sales Managers  
Account Manager, Sales Manager, Director of Sales  
Typical Experience: 3 to 5 years  
Median Hourly Wage: \$31.90

0621  
Retail and Wholesale Trade Managers  
Director of Operations, General Manager, District Manager  
Typical Experience: 3 to 5 years  
Median Hourly Wage: \$24.35

1112  
Financial and Investment Analysts  
Financial Analyst, Mobile Investment Consultant, Commercial Services Analyst  
Typical Experience: 1 to 5 years  
Median Hourly Wage: \$32.56

1123  
Professional Occupations in Advertising, Marketing, and Public Relations  
Communications Specialist, Marketing Coordinator, Social Media Coordinator  
Typical Experience: Entry-level to 3 years  
Median Hourly Wage: \$29.99

2171  
Information Systems Analysts and Consultants  
Business Systems Analyst, IT Consultant, Quality Control Analyst  
Typical Experience: 1 to 3 years  
Median Hourly Wage: \$33.84

2174  
Computer Programmers and Interactive Media Developers  
Java Programmer, Business Application Programmer, Software Developer  
Typical Experience: Entry-level to 3 years  
Median Hourly Wage: \$30.82

3012  
Registered Nurses and Registered Psychiatric Nurses  
Registered Nurse, Palliative Registered Nurse, Mental Health Nurse  
Typical Experience: Entry-level to 3 years  
Median Hourly Wage: \$35.15

3131  
Pharmacists  
Pharmacist, Area Relief Pharmacist, Clinical Consultant Pharmacist  
Typical Experience: 1 to 3 years  
Median Hourly Wage: \$51.17

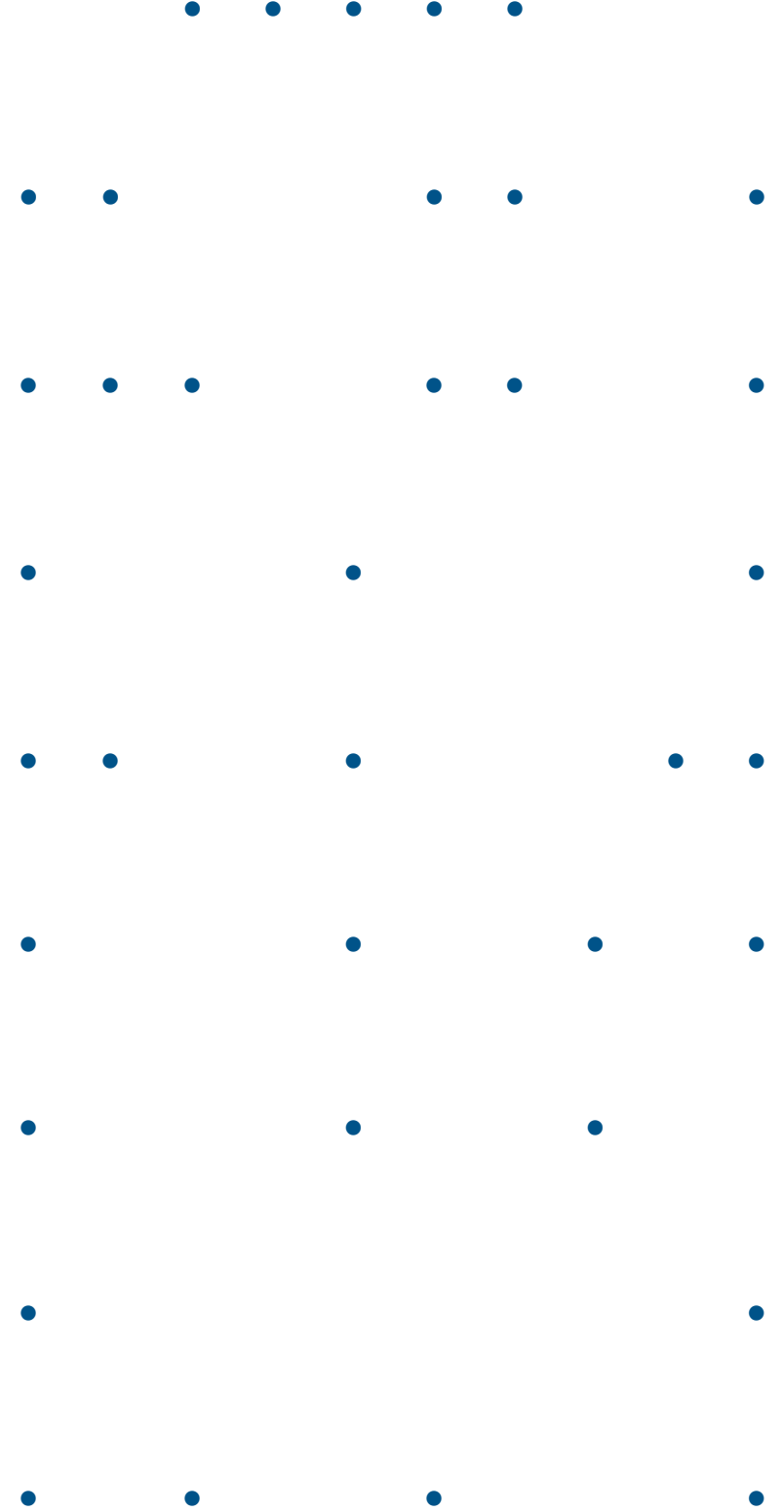
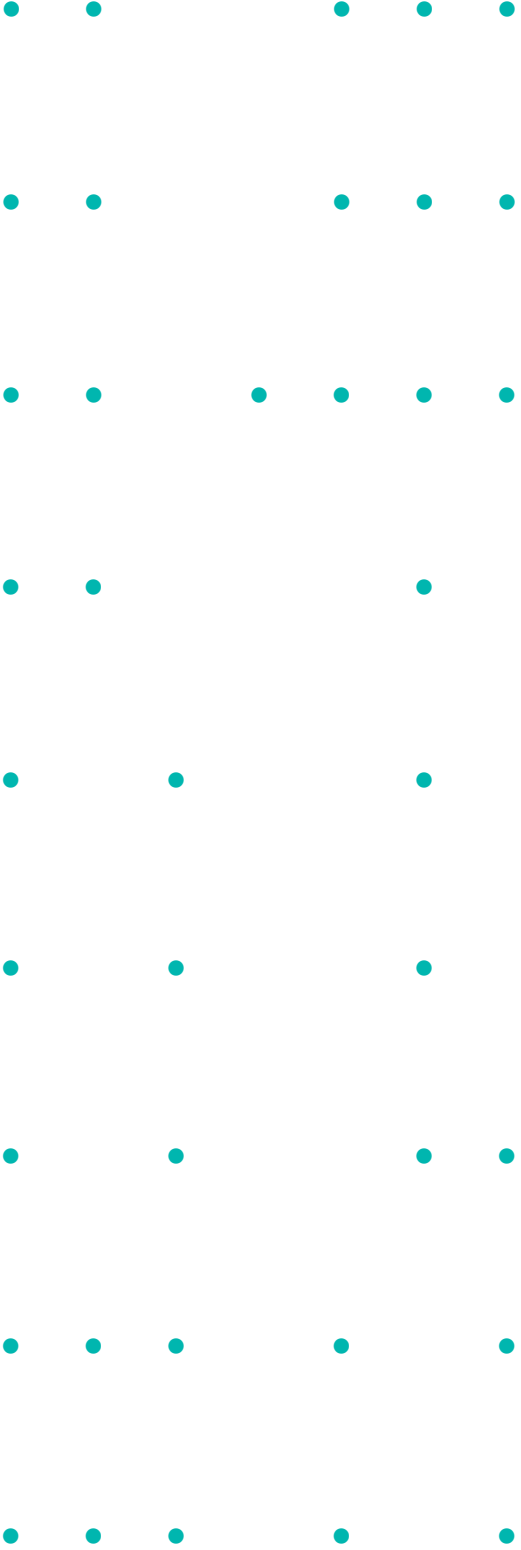
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# SOFT SKILLS

# TECHNICAL SKILLS

Interpersonal  
Planning  
Attention To Detail  
Conflict Resolution  
Leadership  
Self-Motivation  
Teamwork

Analysis  
Marketing  
Operations Management  
Scheduling  
Report-Writing  
Supervising  
Recruiting  
Computer Programming  
Public Relations  
Advising





# FOUNDATIONAL SKILLS

## NATIONAL OCCUPATION CODE & TITLE

**SKILL LEVEL B: COLLEGE OR VOCATIONAL EDUCATION OR APPRENTICESHIP TRAINING**

Oral Communication    Written Communication    Computer Use    Document Use    Numeracy    Problem Solving    Critical Thinking    Decision Making

1215  
Supervisors, Supply Chain, Tracking, and Scheduling Co-ordination Occupations  
Production Supervisor, Warehouse Supervisor, Inventory Control Supervisor  
Typical Experience: 1 to 5 years  
Median Hourly Wage: \$20.68

1221  
Administrative Officers  
Project Administrator, Office Administrator, Customer Liaison  
Typical Experience: Entry-level to 2 years  
Median Hourly Wage: \$21.38

1241  
Administrative Assistants  
Administrative Assistant, Program Assistant, Executive Administrative Assistant  
Typical Experience: Entry-level to 2 years  
Median Hourly Wage: \$18.83

2232  
Mechanical Engineering Technologists and Technicians  
Mould Designer, Machine Designer, Tool Designer  
Typical Experience: Entry-level to 2 years  
Median Hourly Wage: \$27.11

2253  
Drafting Technologists and Technicians  
CAD Technician, Drafter, Design Detailer  
Typical Experience: Entry-level to 2 years  
Median Hourly Wage: \$22.99

2282  
User Support Technicians  
Customer Support Agent, Fleet Systems Support Specialist, Technical Support Analyst  
Typical Experience: Entry-level to 2 years  
Median Hourly Wage: \$21.24

3233  
Licensed Practical Nurses  
Registered Practical Nurse, Care Supervisor, Registered Practical Nurse - Adult Day Program  
Typical Experience: Entry-level to 2 years  
Median Hourly Wage: \$23.85

5254  
Program Leaders and Instructors in Recreation, Sport, and Fitness  
Aquatics Instructors, Recreation Program Instructors, Fitness Trainers  
Typical Experience: Entry-level to 2 years  
Median Hourly Wage: \$12.73

6222  
Retail and Wholesale Buyers  
Merchandiser, Merchandise Associate, Lead Merchandising Accessories  
Typical Experience: 3 to 5 years  
Median Hourly Wage: \$19.52

1215	●	●	●	●	●	●	●
1221	●	●	●	●	●	●	●
1241	●	●	●	●	●		
2232	●	●	●	●	●	●	
2253	●	●	●	●	●	●	
2282	●	●	●	●		●	●
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5254	●			●		●	●
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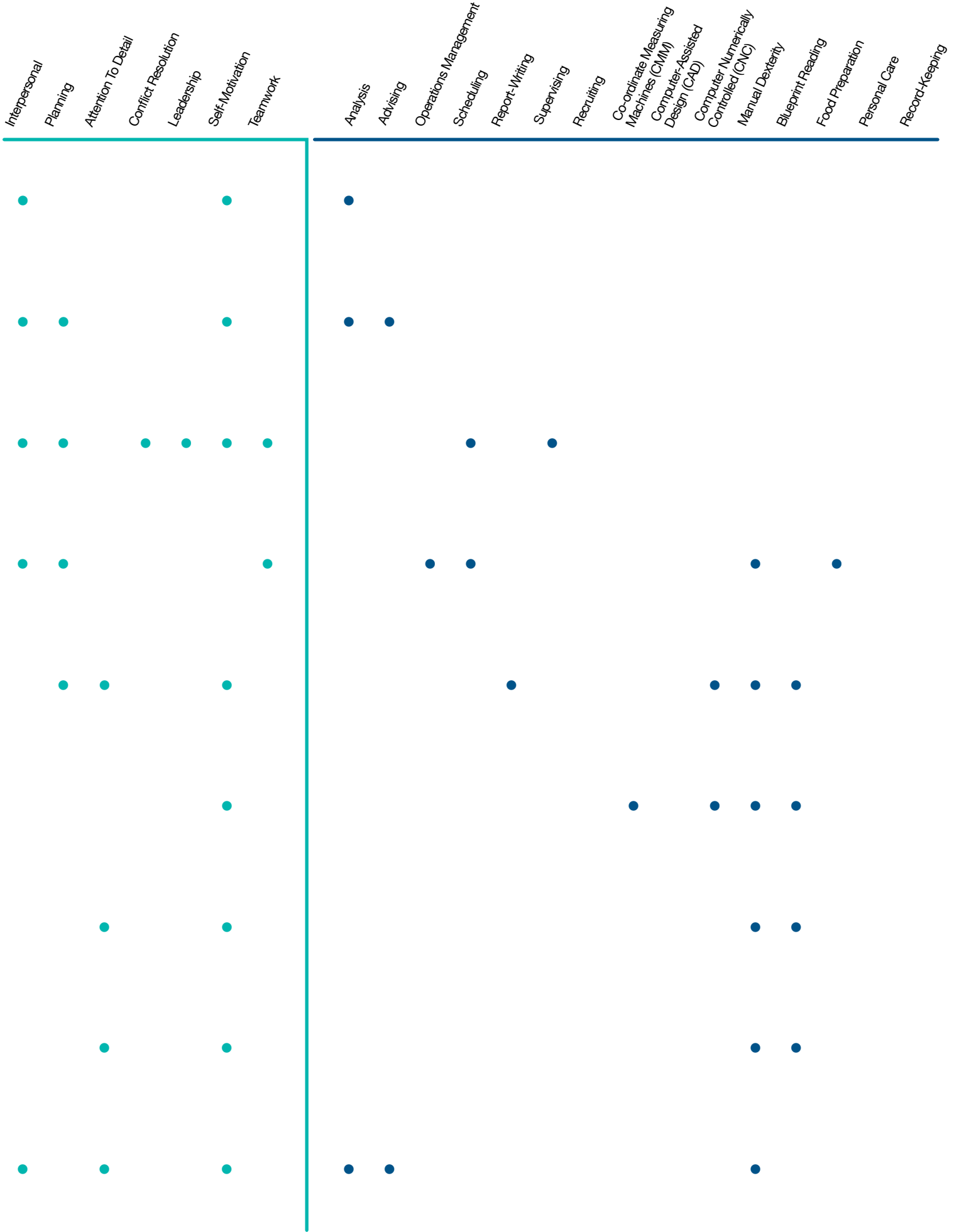






# SOFT SKILLS

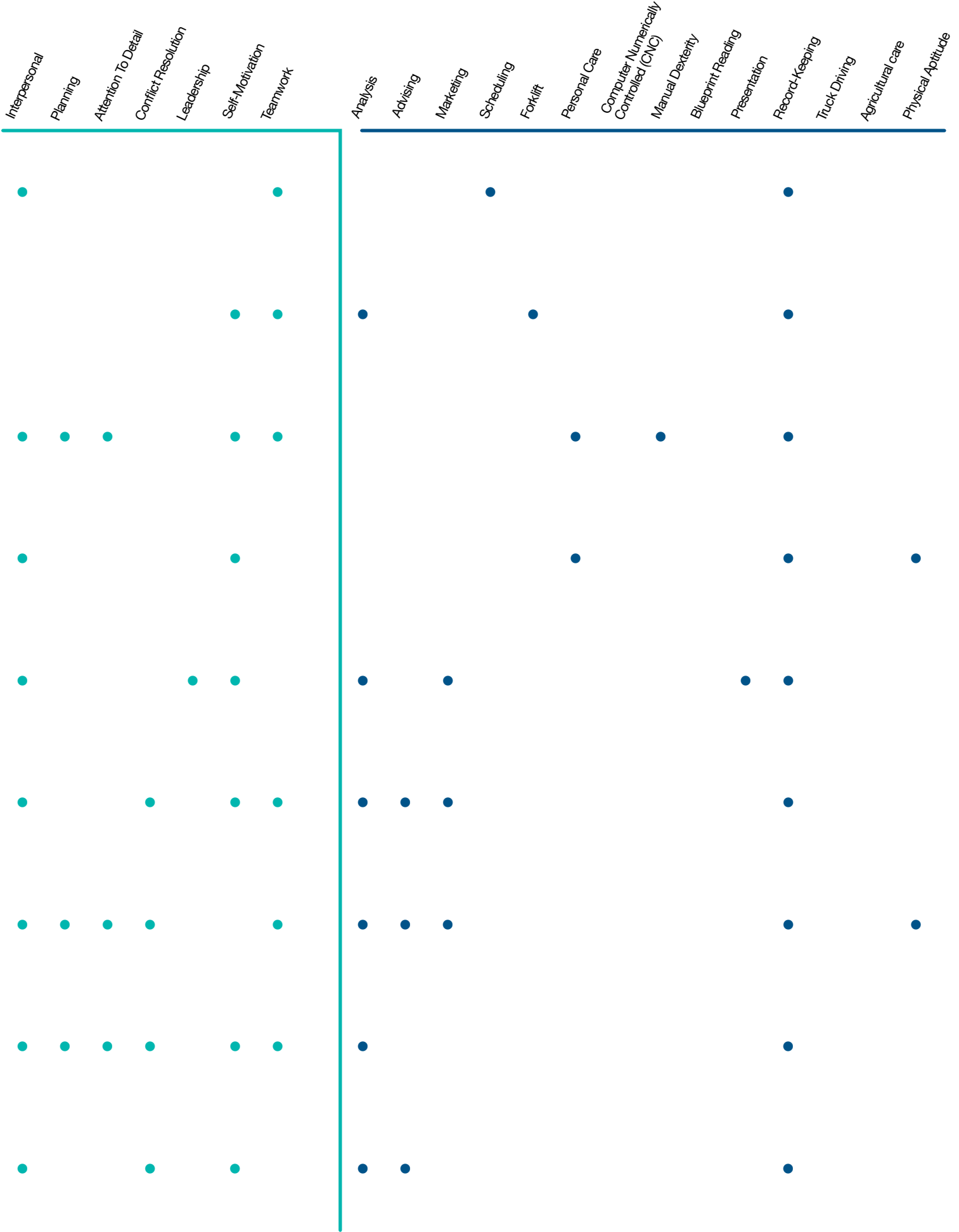
# TECHNICAL SKILLS





# SOFT SKILLS

# TECHNICAL SKILLS



# FOUNDATIONAL SKILLS

## NATIONAL OCCUPATION CODE & TITLE

**SKILL LEVEL C: SECONDARY SCHOOL AND/OR OCCUPATION-SPECIFIC TRAINING**

Oral Communication    Written Communication    Computer Use    Document Use    Numeracy    Problem Solving    Critical Thinking    Decision Making

6562  
Estheticians, Electrologists, and Related Occupations  
Cosmetician, Skin Care Specialist, Beauty Advisor  
Typical Experience: Entry-level to 1 year  
Median Hourly Wage: \$12.60

7452  
Material Handlers  
Forklift Driver, Material Handler, Warehouse Associate  
Typical Experience: Entry-level  
Median Hourly Wage: \$17.83

7511  
Transport Truck Drivers  
Long Haul Truck Driver, Freight Truck Driver, AZ Company Drivers  
Typical Experience: Entry-level to 1 year  
Median Hourly Wage: \$19.65

8431  
General Farm Workers  
Farm Labourer, Barn Worker, Mushroom Farm Worker  
Typical Experience: Entry-level  
Median Hourly Wage: \$13.89

8432  
Nursery and Greenhouse Workers  
Greenhouse Worker, Nursery Worker, Pest Scout  
Typical Experience: Entry-level  
Median Hourly Wage: \$11.51

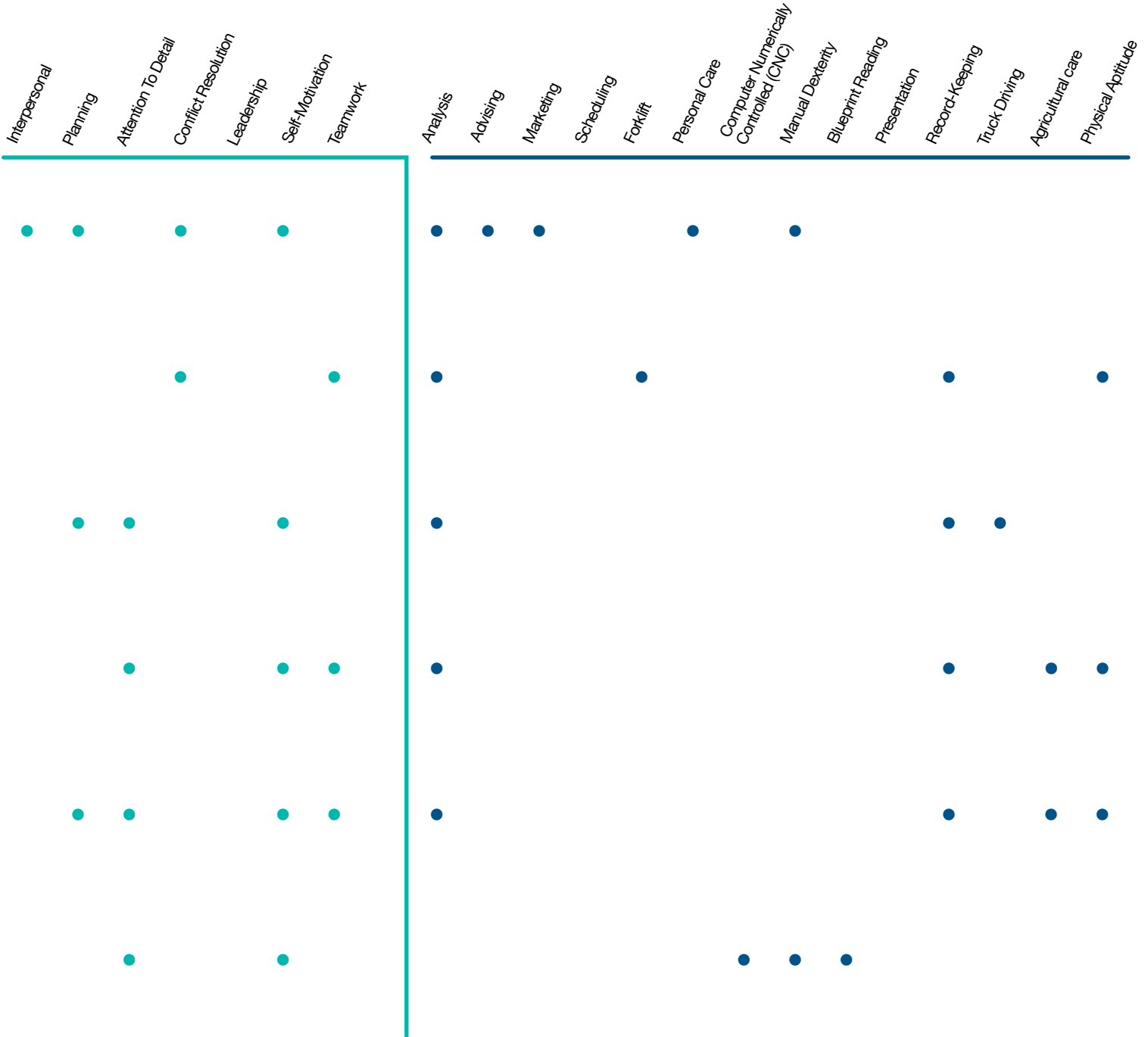
9417  
Machining Tool Operators  
CNC Operators, Boring Mill Operator, Gundrill Operator  
Typical Experience: Entry-level to 2 years  
Median Hourly Wage: \$19.73

Occupation	Oral Communication	Written Communication	Computer Use	Document Use	Numeracy	Problem Solving	Critical Thinking	Decision Making
6562 Estheticians, Electrologists, and Related Occupations	●				●		●	●
7452 Material Handlers	●		●	●	●			
7511 Transport Truck Drivers	●			●	●			
8431 General Farm Workers	●			●	●		●	●
8432 Nursery and Greenhouse Workers	●			●	●		●	●
9417 Machining Tool Operators	●		●	●	●		●	



# SOFT SKILLS

# TECHNICAL SKILLS





**FOUNDATIONAL  
SKILLS**

**SOFT SKILLS**

**TECHNICAL SKILLS**

**NATIONAL OCCUPATION  
CODE & TITLE**

**SKILL LEVEL D: ON-THE-JOB TRAINING  
OR NO FORMAL EDUCATION REQUIRED**

	Oral Communication	Computer Use	Document Use	Numeracy	Interpersonal Planning	Attention To Detail	Self-Motivation	Teamwork	Analysis	Marketing	Machine Operation	Manual Dexterity	Blueprint Reading	Record-Keeping	Cleaning	Food Preparation	Physical Aptitude	Horticulture
6611 Cashiers Cashier, Gas Bar Cashier, Customer Service Cashier Typical Experience: Entry-level Median Hourly Wage: \$11.37	●	●	●		●	●	●	●						●				
6622 Store Shelf Stockers, Clerks, and Order Fillers Overnight Fulfillment Team, Order Picker, Grocery Clerk Typical Experience: Entry-level Median Hourly Wage: \$10.97	●	●	●	●	●	●	●	●						●	●		●	
6623 Other Sales Related Occupations Greeter, On Site Service Representative, Personal Shopper Typical Experience: Entry-level Median Hourly Wage: \$11.40	●	●	●		●	●	●	●						●				
6711 Food Counter Attendants and Kitchen Helpers Team Member, Cook's Helper, Dishwasher Typical Experience: Entry-level Median Hourly Wage: \$11.22	●	●	●		●	●	●	●						●	●	●	●	
6733 Janitors, Caretakers, and Building Superintendents Maintenance Assistant, Custodian, Industrial Cleaner Typical Experience: Entry-level to 1 year Median Hourly Wage: \$17.56	●				●	●	●							●	●		●	
7611 Construction Trades Helpers and Labourers Construction Labourer, Renovation Carpenter Helper, Concrete Labourer Typical Experience: Entry-level to 1 year Median Hourly Wage: \$17.01	●		●	●		●	●		●	●	●		●		●			
8612 Landscaping and Grounds Maintenance Labourers Grounds Maintenance Worker, Lawn Mowing Worker, Landscape Labourer Typical Experience: Entry-level Median Hourly Wage: \$14.11	●					●	●		●	●					●	●		
9619 Other Labourers in Processing, Manufacturing, and Utilities General Labourer, Packaging Line Worker, Assembly Line General Labourer Typical Experience: Entry-level Median Hourly Wage: \$12.59	●		●	●			●		●		●	●		●				