

Explore opportunities in

FOOD PRODUCTS & PROCESSING

AGRICULTURE, FOOD & NATURAL RESOURCES CLUSTER

CAREER AND TECHNICAL EDUCATION

2017

Do you enjoy...

- ▶ Working with raw materials
 - ▶ Managing safety procedures
 - ▶ Food chemistry
 - ▶ Studying microorganisms
 - ▶ Engineering principles
 - ▶ Hands on work
 - ▶ Working with food
 - ▶ Managing a clean environment
 - ▶ Learning about food regulations
- ▶ Handling multiple tasks

Minnesota employers want you!

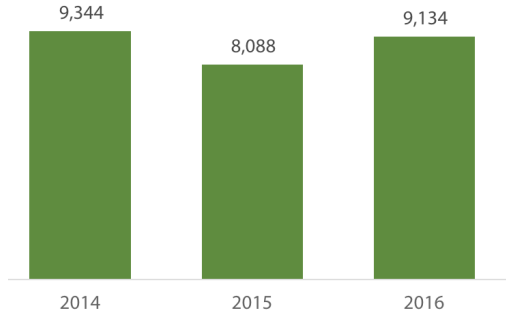
Learn just how far you can **GROW** in these high-demand careers.



Food Products & Processing Systems Career Pathway

The food products and processing pathway is filled with opportunities related to bulk food production, analysis of food content, and the development of ways to process, preserve, package, or store food according to consumer needs and preferences. Research and development of new food products as well as inspection and regulatory occupations are also found in this pathway.

Food Products & Processing Systems Jobs Posted Online in Minnesota



Hiring Statistics in Minnesota (2016)

Growth in jobs 2015-2016:	12.9% (in flux)
Number of employers:	969 employers
Overall outlook:	Stable
Median salary:	\$40,800 / year

Top Occupations

- Supervisors of Production & Operating Workers (35%)
- Chemical Technicians (9%)
- Helpers - Production Workers (8%)
- Hand Laborers & Material Movers (7%)
- Chefs & Head Cooks (7%)

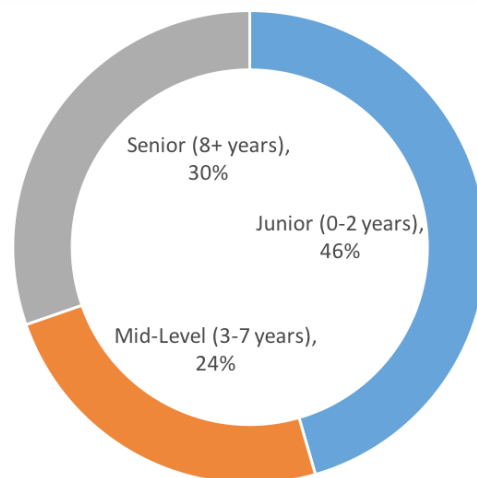
Sample First-Year Job Titles in this Pathway

- Food & Dairy Plant Sanitation Chemical Sales, Ecolab
- General Food Production, The Management Group
- Meat Department Associate, Borchert's Meak Market

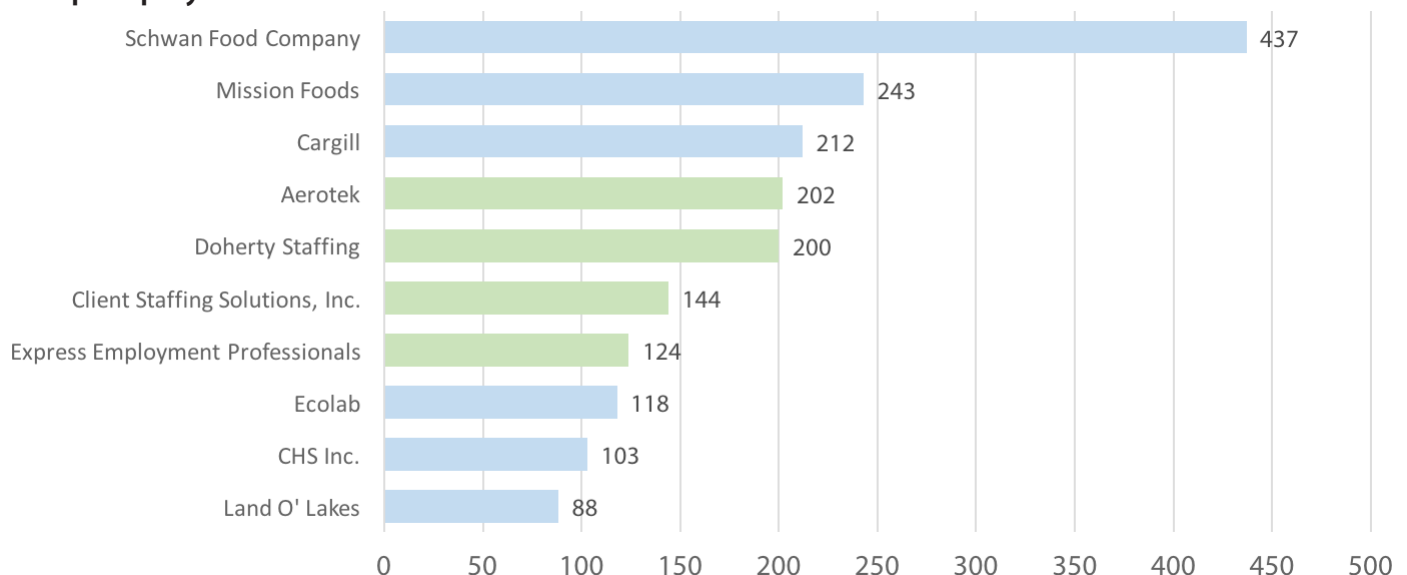
Sample Senior Job Titles in this Pathway

- Meat & Food Scientist, AURI
- Dairy Production Supervisor, Land O' Lakes
- Corporate Co-Manufacturing Food Safety Manager, Michael Foods, Inc.

Experience Level Sought



Top Employers who Recruited in 2016



Top 5 Certifications

1. Food Safety Programs ↗
2. Occupational Safety & Health Administration (OSHA) ↗
3. Safe Quality Food ↗
4. Science of Baking Course ↗
5. Material Handling Equipment ↗

Top 10 Hard Skills

1. Good Manufacturing Practice ↗
2. Hazard Analysis & Critical Control Points ↗
3. Quality Assurance / Control ↗
4. Material Handling ↗
5. Forklifts ↗
6. Lean Manufacturing ↗
7. Quality Systems ↗
8. Preventive Maintenance ↗
9. Technical Support ↗
10. Quality Management ↗

Top 10 Soft Skills

1. Communication Skills ↗ ▲
2. Detail-Oriented ↗ ▲
3. Problem Solving ↗ ▲
4. Teamwork ↗ ▲
5. Leadership ↗ ▲
6. Work Independently ↗
7. Organizational Skills ↗
8. Integrity ↗ ▲
9. Self-Motivated ↗
10. Troubleshooting ↗

↗ Rising Skills (+5% or more from 2015 to 2016)

▲ Matches to CTE Foundation Knowledge/Skill

Occupations	Job Titles	Total Job Count 2016	Change from 2015	Median Salary	Most common Education Level Requirement	
Food Products & Processing	First-Line Supervisors of Production and Operating Workers	Sanitation Team Lead, Kitchen Formulation Team Lead, Process Control Supervisor, Production Supervisor, Product	3,202	14.4% ↗	\$ 52,074	Bachelor's Degree
	Chemical Technicians	Analytical Lab Lead, Piloting Technician, Canola Oil Lab Technician, Fiber Lab Technician, Milk Lab Technician, Organic Prep Analyst, Water Quality Technician	844	9.5% ↗	\$ 33,200	Bachelor's Degree
	Helpers--Production Workers	Poultry Transfer Worker, Food Production Worker, Line Attendant	750	-2.7%	\$ 22,455	GED/High School
	Laborers and Freight, Stock, and Material Movers, Hand	Full Case Grocery Selector, Freezer Selector, Material Handler, Merchandise Receiver, Warehouse Palletizer	677	-12.2%	\$ 22,555	GED/High School
	Chefs and Head Cooks	LSC Sous Chef, Head Start Cook, Decorator Pastry Chef	611	-20.8%	\$ 37,855	GED/High School
	Food Scientists and Technologists	Product Development Manager, Dairy Research Nutritionist, Food Technologist, Meat & Food Scientist, Extrusion Technologist, R&D Manager	496	-35.7%	\$ 68,529	Bachelor's Degree
	Nonfarm Animal Caretakers	Premium Pet Food Specialist, Animal Care Technician, Swine Handler	415	-46.2%	\$ 27,198	GED/High School
	Packaging and Filling Machine Operators and Tenders	Packaging Operator, Bundler, Chip Packer, Tray Loader, Press Packer, Machine Operator, Chemical Operator	284	-63.2%	\$ 23,200	GED/High School
	Mechanical Engineers	R&M Engineer, Mechanical Systems Engineer, Application Engineer, Piping Design Engineer, Product Engineer, Field Test Engineer	212	-72.5%	\$ 76,403	Bachelor's Degree
	Production, Planning, and Expediting Clerks	Inventory Control Analyst, Expeditor, Master Scheduler, Load Planner, Production Controller	201	-73.9%	\$ 36,575	GED/High School
	Food and Tobacco Roasting, Baking, and Drying Machine Operators and Tenders	Bean Roaster, Evaporator/Dryer Operator, Oven Operator, Roastmaster, Machine Operator & Adjuster, Relief Operator	142	115.2% ↗	\$ 26,718	GED/High School
	Pest Control Workers	Pest Route Technician, Certified Pest Control Technician, Commercial Exterminator	121	3.4%	\$ 32,036	GED/High School
	Agricultural Sciences Teachers, Postsecondary	Assistant Professor of Manure Management & Water Quality, Department Head - Food Science and Nutrition, Instructor of Food Science	110	57.1% ↗	\$ 47,691	Bachelor's Degree
	Food Cooking Machine Operators and Tenders	Corn Operator, Popcorn Cook, Caramel Cook, Dairy Relief Operator, Powder Handler, Machine Operator, Cheese Filler Operator	92	13.6% ↗	\$ 26,596	GED/High School
	Meat, Poultry, and Fish Cutters and Trimmers	Meat & Seafood Department Specialist, Meat Cutter, Meat Manager, Hog Evaluator, Deboner, Breast Trimmer	88	44.3% ↗	\$ 23,580	GED/High School
	Agricultural Inspectors	Food Inspector, Slaughter Inspector, Brand Inspector, Food Sanitarian, Grain Inspector	88	104.7% ↗	\$ 42,007	Bachelor's Degree
	Packers and Packers, Hand	Bagger, Inspector Packer, Pack Out Operator, Dairy Night Packer, Meat Wrapper	84	12.0% ↗	\$ 20,766	GED/High School
	Farmers, Ranchers, and Other Agricultural Managers	Grain Location Manager, Grain Manager, Food Production Manager	73	53.2% ↗	\$ 43,032	Bachelor's Degree
	Bakers	Bakery Production Associate, Baker, Cake Decorator, Bakery Manager	64	8.5% ↗	\$ 22,179	GED/High School
	Mixing and Blending Machine Setters, Operators, and Tenders	Blender, Blending Technician, Coater Operator	61	-33.0%	\$ 26,422	GED/High School
Food Batchmakers	Melter/Churn Operator, Batching Operator, Donut Maker, Dough Scaler & Mixer, Machine Operator, Cheese Creamer Operator, Assistant Cheesemaker	61	-9.0%	\$ 25,954	GED/High School	

↗ Rising Jobs (+5% or more from 2015 to 2016)

☀ Bright Future Jobs (DEED-identified)

🌿 Green Jobs (DEED-identified)

Data collected from online job postings between 2013 and 2016 from CEB TalentNeuron Recruit in January 2017 (www.wantedanalytics.com). Report developed by RealTime Talent February 2017 with the support of AgCentric, the Southern Minnesota Center for Agriculture, GreenSeam, AgriGrowth, the Minnesota Department of Agriculture, Career and Technical Education Consortium Leaders, and faculty from Minnesota State colleges and universities across the state.

Food Products & Processing Systems Career Pathway

A collaboration of Minnesota State Colleges, Universities, and Industry

Food Products & Processing Systems Occupations (continued)

Occupations	Job Titles	Total Job Count 2016	Change from 2015	Median Salary	Most common Education Level Requirement
Butchers and Meat Cutters	Meat Clerk, Butcher, Meat Specialist	58	45.0% ↑	\$ 29,303	Associate Level
Machine Feeders and Offbearers	Production Press Helper, Feed Batch Operator, Feed Mill Operator, Tapering Assistant, Feed Mill Production Assistant	55	0.0%	\$ 23,561	GED/High School
Assemblers and Fabricators, All Other	Mechanical Assembler, Finisher, Riveter	45	25.0% ↑	\$ 24,722	GED/High School
Material Moving Workers, All Other	Palletizer, Grain Elevator Operator, Warehouse Elevator Operator	40	25.0% ↑	\$ 22,628	GED/High School
Crushing, Grinding, and Polishing Machine Setters, Operators, and Tenders	Batch Mixer, Crusher Operator, Gridner Operator, Process Operator, Prep Operator	31	3.3%	\$ 27,542	GED/High School
First-Line Supervisors of Agricultural Crop and Horticultural Workers	Farm Crew Marketeer, Agriculture Account Manager, Farm & Shop Operations Lead, Farmers Market Crew, Supervisory CBP Agriculture Specialist	30	-26.8%	\$ 47,373	Bachelor's Degree
Graders and Sorters, Agricultural Products	Agricultural Commodity Grader - Poultry, Produce Inspector, Meat & Produce Order Filler, Cheese Grader	26	-3.7%	\$ 32,242	GED/High School
First-Line Supervisors of Helpers, Laborers, and Material Movers, Hand	Front Line Supervisor, Material Handler Supervisor, Team Leader	25	4.2%	\$ 34,795	GED/High School
Quality Control Analysts	Crystal Sugar Quality Control Analyst, QA Microbiologist, QA Lab Tech, Quality Control Auditor, Quality Control Specialist	22	22.2% ↑	\$ 37,508	Bachelor's Degree
Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders	Blender/Cook, Brewer, Cellar Worker, Cheese Maker, Digerster Cook, Machine Tender, Pulper Operator, Winemaker	16	220.0% ↑	\$ 36,866	GED/High School
Cutting and Slicing Machine Setters, Operators, and Tenders	Cutting Pressman, Meat Cutter/Grinder Operator	9	-57.1%	\$ 34,089	GED/High School
Agricultural Engineers	Agricultural Project Engineer, Research Application Technology Engineer, Project Engineer	8	0.0%	\$ 75,250	Doctoral Degree
Materials Engineers	Product & Materials Tester, Welding Engineer, Product Engineer	7	-58.8%	\$ 72,000	Bachelor's Degree
Cargo and Freight Agents	Relocation Coordinator, Special Services Agent, Air Export Agent	4	-42.9%	\$ 79,500	Bachelor's Degree
Cooling and Freezing Equipment Operators and Tenders	Equipment Operator, Freezer Operator	4	33.3% ↑	\$ 26,980	GED/High School
Milling and Planing Machine Setters, Operators, and Tenders, Metal and Plastic	Feed Mill Operator, Feed Milling Internship	3	66.0% ↑	\$ 27,373	Bachelor's Degree
Chemical Equipment Operators and Tenders	Equipment Operator, Bi Pro Operator, Chemical Operator, Chlorination Operator, Spray Dry Operator	3	-25.0%	\$ 39,000	GED/High School
Slaughterers and Meat Packers	Slaughterer, Meat Wrapper	2	0.0%	\$ 28,480	GED/High School
Cutters and Trimmers, Hand	Bundler, Meat Cutter	2	-71.4%	\$ 19,000	GED/High School
Tank Car, Truck, and Ship Loaders	Truck Loader, Poultry & Meat Receiver	1	100.0%	\$ 27,040	GED/High School
Aquacultural Managers	Natural Resources & Fisheries Sourcing Manager	1	0.0%	\$ 61,116	Bachelor's Degree

About RealTime Talent

RealTime Talent is a collaboration between public agencies, private industry, higher education, and workforce developers. We are focused on helping decision-makers better align our workforce with our growing economy. Since August 2015, we have trained more than 1,000 leaders across Minnesota to use real-time job posting data to help find solutions to our state's greatest workforce challenges. We are proud to be considered a "hub" for data innovation and exploration.

RealTime Talent provides customized research and data analysis services to employers, non-profits, workforce centers, chambers of commerce, educators, and administrators to maximize learning from new data sources. Products include industry fact sheets, occupational snapshots, employer engagement strategizing, custom surveys, and job market analytics utilizing the real-time data tool TalentNeuron Recruit among other unique LMI data sources. Industry research has focused in healthcare, information technology, agriculture, construction, transportation and manufacturing.

Prepared By

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Based on Agriculture, Food and Natural Resources
Career Pathways from Minnesota State CTE



RealTime Talent
Using data to build the
world's best workforce